

STORES DEPARTMENT

Management Standards for Hazardous Waste Facilities

BOSTON EDISON COMPANY GENERAL OFFICES BOD BOYLSTON STREET BOSTON, MASSACHUSETTS 02199

May 20, 1983

Mr. Richard Chalpin
Acting Deputy Regional Enviornmental Engineer
Department of Enviornmental Quality Engineering
Metropolitan Boston - Northeast Region
323 New Boston Street
Woburn, Ma. 01801

Re: Notice of Hazardous Waste Regulations Violations Boston Edison Materials Management Center Watertown, Ma. MADOOO845412

Dear Mr. Chalpin:

In response to your letter of March 21, 1983 and several subsequent discussions with your staff, we are enclosing a revised copy of the Boston Edison Company "Stores Department - Management Standards for Hazardous Waste Facilities". This document includes the requested Contingency and Waste Analysis Plans for our Materials Management Center in Watertown, Ma. MADOOO845412, which you requested.

The 1981 Annual Report described in 310 CMR 30-332 has already been submitted, and includes all information required from the date these regulations become effective.

Copies of the Contingency Plan will be submitted to local officials after you have had a chance to review it.

If there are any questions on these plans; please contact Mr. Peter Gravallese of our Enviornmental Affairs Division, telephone #424-2584.

Very truly yours.

J. A. Lepore Superintendent Stores Department

encl.

cc: Mr. F. M. Lee - BECo

Mr. P. A. Gravallese - BECo

Ms. Ida Babroudi - DHW

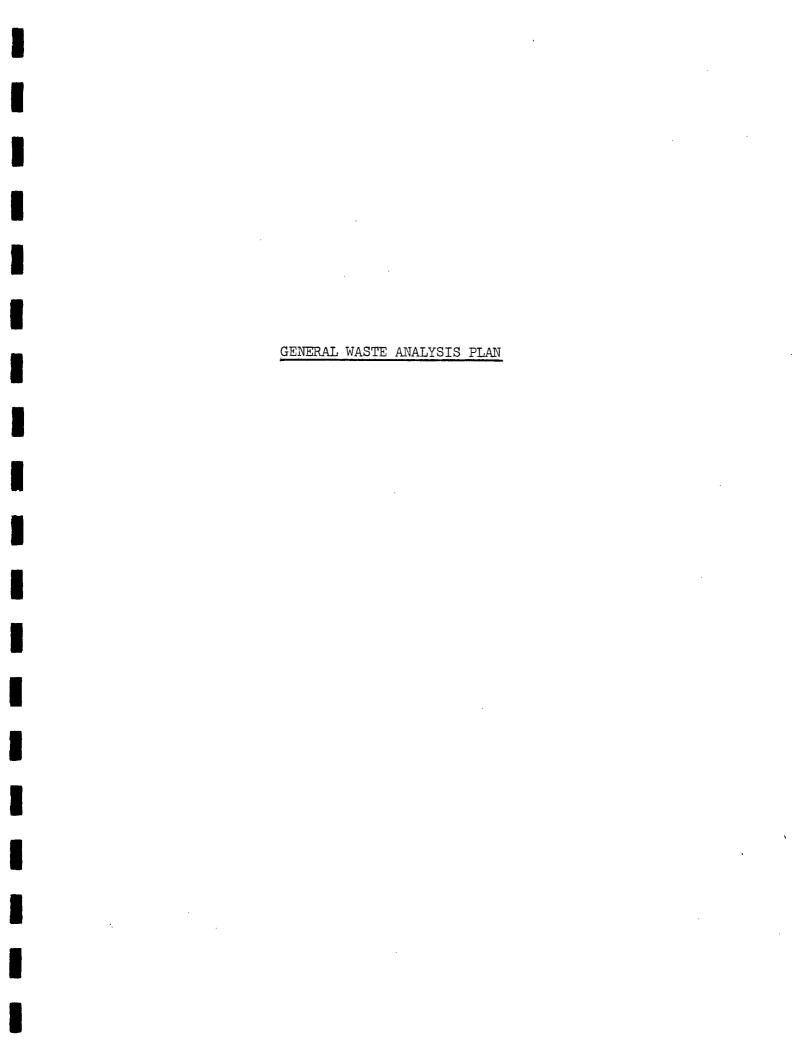
Mr. Stephen Yee - EPA

STORES DEPARTMENT

Management Standards for Hazardous Waste Facilities

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GENERAL WASTE ANALYSIS PLAN

I. Purpose

A. This General Waste Analysis Plan was prepared in accordance with DEQE Regulations for Hazardous Waste 310 CMR 30.513. It contains the information required for the proper storage and disposal of all wastes received and/or generated at the facility in compliance with the DEQE Phase I Hazardous Waste Regulations.

II. General Waste Analysis

A. Before treating, storing, using, or disposing of any hazardous waste, obtain a detailed chemical and physical analysis of a representative sample of the waste. At a minimum this analysis shall contain all the information which needs to be known to treat, store, use, or dispose of the waste in compliance with the requirements of 310 CMR 30.500 and with the conditions of the facility's license in effect at that time pursuant to 310 CMR 30.800. The analysis may include data developed by the generator pursuant to 310 CMR 30.302 and existing published or documented data on the hazardous waste or on hazardous wastes generated from processes similar to those which generate that waste.

The analysis shall be made when a material or waste is first used, and at a minimum, repeated when there is notification or reason to believe, that the process or operation generating the hazardous waste has changed; and, for shipments from off-site sources, when the results of the inspection required by 310 CMR 30.513(1) (d) indicate that the hazardous waste received at the facility is not as described on the accompanying manifest or shipping paper.

Each hazardous waste shipment received at the facility shall be inspected and, if necessary, analyzed to determine whether it is as described on the accompanying manifest or shipping paper.

- B. Analysis methods for various items are detailed in the attached Waste Analysis Procedures (Exhibit #B).

 Special requirements, for PCB classification and analysis will be in accordance with EPA regulations for testing and classification as detailed in Part 761 Polychlorinated Biphenyls (PCB's) Manufacturing Processing Distribution in Commerce and Use Prohibitions including:
 - Insulating oils in electrical equipment shall be considered to be PCB contaminated unless tested and proven otherwise.
 - Cable oils may be considered non-PCB for class-ification and handling purposes.
 - Oil filled electrical equipment will be tested when processed through the Central Shop for classification and/or reclassification to non-PCB units as required.
 - Use of a common container for collection of oils

provided no known dilution is allowed to take place, will be employed where practical.

ISSUED BOSTON EDISON COMPANY NUMBER 4-1-83 WASTE ANALYSIS PROCEDURE REVISION PAGE OF PAGES PCB ANALYSIS BY GAS CHROMATOGRAPHY 1.0 **PURPOSE** Quantitatively determining the concentration of polychlorinated biphenyls in 10 electrical insulating mineral oils and other substances that may have been contaminated by such liquids by gas chromatography. 11 12 Reference for this procedure is: ASTM D4059-82 Analysis of Polychlorinated Biphenyls in 13 Mineral Insulating Oils by Gas 14 Chromatography 15 2.0 METHOD SUMMARY 16 The sample is diluted with hexane. The resulting solution is treated by a 17 procedure to remove interfering substances after which a small portion of the resulting solution is injected into a packed gas chromatographic 18 column. The components are separated as they pass through the column with 19 carrier gas and their presence in the effluent is measured by an electron capture (EC) detector and recorded as a chromatogram. The method is made 20 quantitative by comparing the sample chromatogram with a chromatogram of a 21 known quantity of one or more standard Aroclors, obtained under the same conditions. 22 3.0 23 EQUIPMENT 24 Gas Chromatograph: Hewlett - Packard Co. Model 5710A 25 26 Equipped with: Electron Capture Detector Hewlett - Packard Model 27 18713A Detector Cell 28 Interfaced with: Hewlett - Packard Integrator 29 Model 3390A 30 31 32 33 34

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BOSTON EDISON COMPANY Engineering, Planning and Research Department

General Test Division
RCRA Waste Analysis Procedure

NUMBER GTD

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1.0 Discussion

The following analyses will be performed by the General Test Division on samples submitted to the Laboratory for the determination of hazardous waste properties. All analyses will be performed in accordance to EPA Publication Number SW-846-1980, "Test Methods for Evaluating Solid Waste - Physical and Chemical Methods". The actual analyses to be performed on each sample is at the discretion of the analysis and is to be determined by the type of sample submitted for analysis and the background data of the specific sample.

Ignitability, Corrosivity, Reactivity - Extraction Procedure Toxicity and Composition

2.0 Ignitability:

- 2.1 Purpose To identify wastes which present a fire hazard under routine storage, disposal and transportation.
- 2.2 Method Summary The flash point of the waste is determined using a Pensky-Martins closed-cup tester. The sample waste is heated at a slow, constant rate with continual stirring. A small flame is directed into the cup at regular intervals with simultaneous interruption of stirring. The flash point is the lowest temperature at which application of the test flame causes the vapor above the sample to ignite.

3.0 Corrosivity:

- 3.1 <u>Purpose</u>: To identify wastes which might pose a hazard to human health or the environment due to their ability to:
 - 1) Mobilize toxic metals if discharged into a landfill environment.
 - 2) Destroy human or animal tissue in the event of inadvertant contact.
- 3.2 Method Summary: The pH of the sample waste is determined electrochemically using a glass electrode in combination with a reference potential. The pH meter (measuring device) is calibrated using a series of solutions of known pH.

4.0 Reactivity:

4.1 <u>Purpose</u>: To identify wastes which pose a problem at all stages of the waste management process because of their extreme instability and tendency to react violently or explode.

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Engineering, Planning and Research Department General Test Division NUMBER GTD

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RCRA Waste Analysis Procedure

- 4.2 <u>Method Summary</u>: Waste evaluation for reactivity to meet the following physical and chemical requirements:
 - Normally unstable and readily undergoes violent change without detonating
 - 2) Reacts violently with water
 - 3) Forms explosive mixtures with water
 - 4) Generates toxic gases, vapors or fumes when mixed with water
 - 5) Generates toxic cyanide or sulfide gases, vapors or fumes when exposed to pH conditions between 2 and 12.5
 - 6) Capable of detonation or explosive reaction if it is subjected to a strong initiating source or heated under confinement
 - 7) Capable of detonation or explosive decomposition at STP.
 - 8) A forbidden explosive as defined in 49CFR 173.51

5.0 Extraction Procedure Toxicity:

- 5.1 <u>Purpose</u>: To simulate the leaching a waste will undergo if disposed of in an improperly designed sanitory landfill.
- 5.2 Method Summary: A representative sample of waste is extracted with distilled water maintained at a pH = 5 using acetic acid. The extract obtained is then analyzed to determine if any of the threshold limits established for 8 trace metals, 4 pesticides and 2 herbicides have been exceeded.

6.0 Composition:

- 6.1 <u>Purpose</u>: To identify waste which by their organic components represent a hazard to human health and the environment.
- 6.2 Method Summary: The organic compounds are introduced to a gas chromatograph by various methods, a temperature program is used for separation and a compound specific detector is used for measurement.

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Engineering, Planning and Research Department
General Test Division
RCRA Waste Analysis Procedure

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7.0 Data and Report

7.1 All data is to be recorded on the RCRA Data Sheet (attached) and reported to the Division requesting the analysis and the Environmental Affairs Department.

Prepared by:

R. F. Driscoll

Chemist

General Test Division

Engineering, Planning & Research

Department

Approved by:

H. F. Standring Division Head

General Test Division

Engineering, Planning & Research

Department

RCRA DATA SHEET

Sample I.D. #			
Test	Method	Result	Spec.
Ignitability	Flash Point	o F	< 140°F
Corrosivity	рН		2 - 12.5
Reactivity	Literature Search	Yes or No	No .
E. P. Toxicity	Trace Metals (DCP):		
	Arsenic	ppm	5.0 ppm
	Barium	ppm	100.0 ppm
	Cadmium	ppm	1.0 ppm
	Chromium	ppm	5.0 ppm
	Lead	ppm	5.0 ppm
	Mercury	ppm	0.2 ppm
	Selenium	ppm	1.0 ppm
	Silver	ppm	5.0 ppm
	Pesticides:	•	
	Endrin	ppm	.02 ppm
	Lindane	ppm	.4 ppm
	Methoxychlor	ppm	10.0 ppm
	Toxaphene	ppm	0.5 ppm
	Herbicides:		
	2, 4, 5, TP	ppm	1.0 ppm
	2, 4 D	ppm	10.0 ppm
Composition	G. C. (Specific Compound)		

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SECURITY PLANS

STORES DEPARTMENT FACILITY SECURITY SYSTEMS HAZARDOUS WASTE AND MATERIALS STORAGE WATERTOWN MATERIALS MANAGEMENT CENTER

1.0 MANNING

This facility is manned during normal work hours by Boston Edison employees as well as contractor personnel. A guard house at the main gate is manned 24 hours a day, seven days a week.

2.0 SECURITY SYSTEMS

The entire facility perimeter is enclosed by an 8-foot high chain link fence topped with barbed wire. A closed circuit television (CC TV) system is also provided which monitors the entire facility perimeter and can be controlled to zoom in on any area of the perimeter or yard area to give a detailed close-up view if required.

In addition, an intrusion detection system monitors the entire perimeter and alarms when anyone or anything crosses the monitoring beam.

There are monitoring alarms on the exterior doors of all buildings which indicate when they are opened.

All of the above systems report to the Central Security Station which is manned 24 hours per day, seven days per week. This Security Station is located at the main entrance to the facility.

Entrance to the facility is via a controlled roadway with vehicle lift gates at the security station for entrance and exit. Controlled turnstyles are used for pedestrian access and exit. A magnetic card tape identification system is used at these entrances to control access to various areas within the facility. These programmed cards are issued to all employees at this location and limits their access only to authorized work locations. Other employees and visitors must enter

via the central security station.

The limited access coverage includes the Hazardous Waste Facilities at this location which are limited to Stock Division and supervisory personnel only. All storage areas are also posted for authorized personnel only, as is the exterior fencing surrounding the property.

A comprehensive alarm system for smoke detection and sprinkler system operation is located throughout the facility buildings to provide an immediate alarm for actual and incipient fire problems. This system alarms at the security station, giving the location and type of problem. The security station has a direct alarm to the fire station as well as telephone contact for other types of problems.

STORES DEPARTMENT FACILITY SECURITY SYSTEMS HAZARDOUS WASTE AND MATERIALS STORAGE BOSTON SERVICE CENTER

1.0 MANNING

This area is manned 365 days a year, 24 hours a day by Boston Edison employees and contractor personnel. The guard house at the main gate is also manned 24 hours a day, seven days a week.

2.0 SECURITY SYSTEMS

The facility is surrounded on the perimeter by an 8-foot high chain link fence topped with barbed wire. Main gate entry is controlled by contractor security personnel at all times. Security patrols of the entire property are conducted during all non-scheduled and regular hours.

In addition, storage areas within the property perimeter are enclosed by chain link fences. These areas are posted to permit access by authorized persons only. A new security station, scheduled for completion in June 1983, will have a perimeter CC TV monitoring and communication system as well as security and fire monitoring systems throughout the compound.

Entrance to the facility, and the buildings, including the hazardous waste areas, will be controlled by a magnetic card type security system. These cards are programmed to allow all personnel assigned to this location access to the property, but with controlled access to the various facilities within the property.

GENERAL INSPECTION AND OPERATING PLAN

STORES DEPARTMENT GENERAL INSPECTION & OPERATING PLAN HAZARDOUS WASTE AND MATERIALS

May 15, 1981 Revised: 4/15/83

1.0 PURPOSE

To provide the inspection routines necessary to identify problems in time to prevent or correct before harm to health or environment in accordance with 310 CMR 30.515.

2.0 APPLICABILITY

These requirements apply to the Stores Department Superintendent and to the Stock Division Head and Supervisors.

3.0 RESPONSIBILITIES

- 3.1 The Stores Department Superintendent will be responsible for:
 - 3.1.1 Implementation of this procedure.
 - 3.1.2 The review of the plan and amendment as required.
 - 3.1.3 Assigning necessary personnel to implement.
- 3.2 The Stock Division Head will be responsible for:
 - 3.2.1 Assignment of personnel to implement.
 - 3.2.2 Auditing procedure to assure compliance.
 - 3.2.3 Maintaining proper files as required.

4.0 WASTE AND MATERIALS INSPECTION PROCEDURES

General inspection requirements will be divided into four catagories:

4.1 Hazardous Waste for Disposal Storage Site

- 4.1.1 Will be inspected weekly for container leaks, damage, or improper storage conditions.
- 4.1.2 The "Hazardous Waste Disposal Storage Inspection Report" form will be completed. (See Exhibit 4.1-A)

4.2 <u>Hazardous Material Stock Areas</u>

- 4.2.1 Will be inspected weekly for container leaks, damage, or improper storage.
- 4.2.2 The "Hazardous Materials Storage Report" form will be completed. (See Exhibit 4.2-A)
- 4.2.3 Loading/unloading areas will be inspected weekly and daily for spillage of hazardous materials.

4.3 Cylinder Gas Storage Area

- 4.3.1 Will be inspected weekly for container leaks, damage, or improper storage.
- 4.3.2 The "Gas Cylinder Storage Area Inspection Report" form will be completed. (See Exhibit 4.3-A)

4.4 Oil Reclamation System and Oil Storage Area

- 4.4.1 Will be inspected weekly for leaks, damage, or improper storage, including the oil reclamation system for leaks or damage to piping, valves, gauges, filters, traps, hoses, nozzles, pumps and motors and the loading, unloading and oil packaging areas. Daily inspections will be made when in use.
- 4.4.2 The "Oil Reclamation System and Oil Storage Area Inspection Report" form will be completed. (See Exhibit 4.4-A)
- 4.4.3 All liquids in storage tanks shall be monitored and recorded daily to check for leakage and all tank discharge controls (i.e., valves, berms, etc.) will be inspected weekly.

5.0 RECORDS

- 5.1 The record of all inspections will be given to Stock Division Head for audit and will be filed in Stock Division Office, at the Watertown Materials Management Complex for at least three years from date of inspection.
- 5.2 A copy of each manifest shall be kept for three (3) years from the date of acceptance by the hazardous waste facility by each generator.
- 5.3 A copy of each manifest shall be kept for three (3) years from the date acceptance by the hazardous waste facility by each transporter.

6.0 REPORTS

- 6.1 A monthly report of all hazardous wastes transported must be filed with DEQE by the last day of the next month by the transporter.
- 6.2 An annual report of all wastes transported off site must be submitted to DEQE by March 1 for the preceding year by the generator.
- 6.3 An annual report of all RCRA wastes transported off site must be submitted to DEQE by March 1 for the preceding year by the generator.

INSPECTION REPORT HAZARDOUS WASTE DISPOSAL STORAGE SITE

AR	EA STORAGE CONDITIONS	YES	NO	Corrective Action to be Taken	Date Correct
1.	Contingency Spill Kit Complete and in Place (Check Spill Kit List)				
2.	Fire Extinguishers in Place and Inspected				
3.	All Required Signs in Place and Unobstructed				
4.	Material Handling Equipment Clean and Marked			·	
5.	Storage Berm Pans Clean (Check for Leaks or Stains)				
6.	Containers Checked for Improper Storage, Leaks, Damage				
7.	Containers Checked for Proper Identification, Markings, Dates		,		
8.	Containers Checked for Proper Location and Duration by Date				

B.E.Co. Form X5787

9a. PCB - CONTAMINATED AND PCB TRANSFORMER INSPECTION

TRANSFORMED CEDIAL MUMADED	10017101				AKS		DATE OF		
THANSFORMER SERIAL NUMBER	LOCATION DATE	RANSFORMER SERIAL NUMBER LOCATION		SFORMER SERIAL NUMBER LOCATION DATE BY		YES NO		LEAK-VOLUME	DATE OF CLEAN-UP/REPAIR
1.									
2.									
3.									
4.									
5.									
6.					-				
7.									
8.									
9.						<u> </u>			
10.				1					

⁹b. Records of PCB Transformers Inspection and Maintenance History shall be Maintained for at Least 3 Years After Disposal of the Unit and shall Include the Location, Date of Inspection, Person Performing the Inspection, the Location of any Leaks, an Estimate of Leak Volume, the Date of Cleanup and/or Repair.

B.E.Co. Form X5788

INSPECTION REPORT STOCK STORAGE AREA - HAZARDOUS MATERIAL

Tim	Time								
/	AREA STORAGE CONDITIONS	YES	NO	Corrective Action to be Taken	Date Corrected				
1.	Contingency Spill Kit Complete and in Place (Check Spill Kit List)				Corrected				
2.	Fire Extinguishers in Place and Inspected (Where Required)								
3.	All Required Signs in Place and Unobstructed								
4.	Material Coded and Marked as Required								
5.	Proper Housekeeping and Storage Conditions								
6.	Containers Checked for Leaks, Spills								
7.	Dielectric Fluid Containing Greater than 50ppm PCB must be Stored in an Approved EPA Facility								
8.	PCB Transformers must be Inspected Every Three (3) Months, and the Records of the In- spection and Maintenance History shall be Main- tained for at Least 3 Years after Disposal of the Unit and shall Include the Location, Date of Inspection, Person Performing the Inspection, the Location of any Leaks, an Estimate of Leak Volume, the Date of Cleanup and/or Repair.								
9.	PCB - Contaminated Electrical Equipment								
0.	Loading/unloading areas.								
11.	Discharge Control Systems (when used).								
,	Inspection Made By			Employee Number					

B.E.Co. Form X5788

9a. PCB - CONTAMINATED AND PCB TRANSFORMER INSPECTION

TI	RANSFORMER SERIAL NUMBER	LOCATION	DATE		LEA	AKS		DATE OF
1.		COCATION	DATE	BY	YES	NO	LEAK-VOLUME	DATE OF CLEAN-UP REPAIR
2.								
3.								
4.								
5.		<u>.</u>						
6.								
7.				 				
8.								
9.								
10.								
10.								

B.E.Co. Form X5786

INSPECTION REPORT GAS CYLINDER STORAGE AREA

-		Date							
AR	EA SECURITY	YES	NO	Corrective Action to be Taken	Date Correct				
1.	Doors Function Properly (Check Latches, Locks, Hinges, Knobs)								
2.	Doors Secured								
AR	EA STORAGE CONDITIONS		_						
1.	All Cylinders Capped			·					
2.	Cylinders Properly Stored (Segregated, Upright)								
3.	Cylinders Chained (Chains Too Loose, Not in Use, Missing)		·						
4.	Housekeeping Proper (Clean, Area Free of Trash & Clutter)		•						
5.	All Required Signs in Place and Unobstructed				•				
6.	Fire Extinguishers in Place and Inspected								
Inst	pection Made By			Employee Number					

B.E.Co. Form X5789

INSPECTION REPORT

OIL RECLAMATION SYSTEM AND OIL STORAGE AREA

AREA CONDITIONS	YES	NO	Corrective Action to be Taken	Date Correcte
Contingency Spill Kit Complete and in Place (Check Spill Kit List)			occupation to de vacci	Correcte
2. Fire Extinguishers in Place and Inspected				
3. All Required Signs in Place and Unobstructed				
4. Housekeeping Current and Proper				
5. Containers Checked for Improper Storage, Leaks, Damage				
6. Reclamation System Checked for Leaks, Spills, Housekeeping				
7. Doors and Equipment Function Properly				
8. Dielectric Fluid Containing Greater than 50ppm PCB must be Stored in an Approved EPA Facility				
 Dielectric Fluid Containing Greater than 500ppm PCB must be Stored Seperately in an Approved EPA Fac. 				
_		<u> </u>		(Over)
LDEA GOVERNOUS			Date	
AREA CONDITIONS			•	
10	YES	NO	Corrective Action to be Taken	Date
10. Loading/unloading areas.	YES	NO	Corrective Action to be Taken	Date
10. Loading/unloading areas.	765	NO	Corrective Action to be Taken	Date
10. Loading/unloading areas.	765	NO	Corrective Action to be Taken	Date
10. Loading/unloading areas.	YES	NO	Corrective Action to be Taken	Date
10. Loading/unloading areas.	YES	NO	Corrective Action to be Taken	Date
10. Loading/unloading areas.	YES	NO	Corrective Action to be Taken	Date
10. Loading/unloading areas.	YES	NO	Corrective Action to be Taken	Date
10. Loading/unloading areas.	YES	NO	Corrective Action to be Taken	Date
10. Loading/unloading areas.	YES	NO	Corrective Action to be Taken	
10. Loading/unloading areas.	YES	NO	Corrective Action to be Taken EXHIBIT 4.4A	Date

STORAGE REQUIREMENTS FOR PCB AND PCB CONTAMINATED MATERIALS

References:

- 1. EPA Part 761 Polychlorinated Biphenyls (PCB's) Manufacturing, Processing, Distribution in Commerce and use Prohibitions.
- Commonwealth of Massachusetts Department of Environmental Quality Engineering - Regulations for Hazardous Waste 310 CMR.

The storage of PCBs and PCB items which have been designated for disposal, and the storage of any dielectric fluid 50 ppm PCB shall be stored as follows:

Note: Terms used within this section refer to the definitions provided in Stores Practice 11-8.

- 1. Any PCB Article or PCB Container stored for disposal before January 1, 1983, shall be removed from storage and disposed of as required by this Part before January 1, 1984. Any PCB Article or PCB Container stored for disposal after January 1, 1983, shall be removed from storage and disposed of as required by Subpart D of EPA Part 761 within one year from the date when it was first placed into storage.
- 2. Storage of PCBs and PCB items designated for disposal, and dielectric fluid 50 ppm or greater PCB shall comply with the following requirements:
 - a. The facilities shall meet the following criteria as outlined in in EPA 761.65 (b) 1:
 - Adequate roof and walls to prevent rain water from reaching the stored PCBs and PCB Items;
 - An adequate floor which has continuous curbing with a minimum six inch high curb. The floor and curbing must provide a containment volume equal to at least two times the internal volume of the largest PCB Article or PCB Container stored therein or 25 percent of the total internal volume of all PCB Articles or PCB Containers stored therein, whichever is greater.
 - No drain valves, floor drains, expansion joints, sewer lines, or other openings that would permit liquids to flow from the curbed area;
 - Floors and curbing constructed of continuous smooth and impervious materials, such as Portland cement, concrete or steel, to prevent or minimize penetration of PCBs; and
 - The following PCB Items may, however, be stored temporarily in an area that does not comply with the requirements of paragraph 761.65 (b) 3 for up to thirty days from the date

- The following PCB Items may, however, be stored temporarily in an area that does not comply with the requirements of paragraph 761.65 (b) 3 for up to thirty days from the date of their removal from service, provided that a notation is attached to the PCB Item or a PCB Container (containing the item) indicating the date the item was removed from service;
 - (i) Non-leaking PCB Articles and PCB Equipment;
 - (ii) Leaking PCB Articles and PCB Equipment if the PCB Items are placed in a non-leaking PCB Container that contains sufficient sorbent materials to absorb any liquid PCBs remaining in the PCB Items;
 - (iii) PCB Containers containing non-liquid PCBs such as contaminated soil, rags, and debris; and
 - (iv) PCB Containers containing liquid PCBs at a concentration between 50 and 500 ppm, provided a Spill Prevention Control and Countermeasure Plan has been prepared for the temporary storage area in accordance with 40 CFR 112. In addition, each container must bear a notation that indicates that the liquids in the drum do not exceed 500 ppm PCB.
- b. Non-leaking and structurally undamaged PCB Large High Voltage Capacitors and PCB-Contaminated Electrical Equipment that have not been drained of free-flowing dielectric fluid may be stored on pallets next to a storage facility that meets the requirements of paragraph (b) of 761.65. PCB-Contaminated Electrical Equipment that has been drained of free-flowing dielectric fluid is not subject to these storage provisions. Storage under this subparagraph will be permitted only when the storage facility has immediately available unfilled storage space equal to 10 percent of the volume of capacitors and equipment stored outside the facility. The capacitors and equipment temporarily stored outside the facility shall be checked for leaks weekly.
- c. Any storage area subject to the requirements of paragraph (b) or subparagraph (c)(1) of 761.65 section shall be marked as required in Subpart C-761.40(a)(10).
- d. No item of movable equipment that is used for handling PCBs and PCB Items in the storage facilities and that comes in direct contact with PCBs shall be removed from the storage facility area unless it has been decontaminated as specified in 40 CFR 761.79.
- e. All PCB Articles and PCB Containers in storage shall be checked for leaks at least once every 30 days. Any leaking PCB Articles and PCB Containers and their contents shall be transferred immediately to properly marked non-leaking containers. Any spilled or leaked materials shall be immediately cleaned up, using sorbents or other adequate means, and the PCB-contaminated materials and residues shall be disposed of in accordance with 40 CFR 761.60(a)(4).

- f. Except as provided in subparagraph (g) below, any container used for the storage of liquid PCBs shall comply with the Shipping Container Specification of the Department of Transportation (DOT), 49 CFR 178.80 (Specification 5 container without removable 178.82 (Specification 5B container without removable head). 178.102 (Specification 6D overpack with Specification 2S (178.35) or 2SL (178.35a) polyethylene containers) or 178.116 (Specification 17E container). Any container used for the storage of non-liquid PCBs shall comply with the specifications of 49 CFR 178.80. (Specification 5 container). 178.82 (Specification 5B container) or 178.115 (Specification 17C container). alternate, containers larger than those specified in DOT Specifications 5.5B, or 17C may be used for non-liquid PCBs if the containers are designed and constructed in a manner that will provide as much protection against leaking and exposure to the environment as the DOT Specification containers, and are of the same relative strength and durability as the DOT Specification containers.
- g. Storage containers for liquid PCBs can be larger than the containers specified in subparagraph (f) above provided that:
 - (i) The containers are designed, constructed, and opeated in compliance with Occupational Safety and Health Standards, 29 CFR 1910.106. Flammable and combustible liquids. Before using these containers for storing PCBs, the design of the containers must be reviewed to determine the effect on the structural safety of the containers that will result from placing liquids with the specific gravity of PCBs into the containers (see 29 CFR 1910.106(b)(i)(1).
 - (ii) The owners or operators of any facility using containers described in subparagraph (i) above shall prepare and implement a Spill Prevention Control and Countermeasure (SPCC) Plan as described in 40 CFR 112. In complying with 40 CFR 112, the owner or operator shall read "oil(s)" as "PCB(s)" whenever it appears. The exemptions for storage capacity, 40 CFR 112.1(d)(2), and the amendment of SPCC plans by the Regional Administrator, 40 CFR 112.4, shall not apply unless some fraction of the liquids stored in the container are oils as defined by section 311 of the Clean Water Act.
- h. PCB Articles and PCB Containers shall be dated on the article or container when they are placed in storage. The storage shall be managed so that the PCB Articles and PCB Containers can be located by the date they entered storage. Storage containers provided in subparagraph (g) above shall have a record that includes for each batch of PCBs the quantity of the batch and date the batch was added to the container. The record shall also include the date, quantity, and disposition of any batch of PCBs removed from the container.

- i. Owners or operators of storage facilities shall establish and maintain records as provided in 40 CFR 761.180.
- j. The Commonwealth of Massachusetts DEQC Regulations for Hazardous Waste - 310 CMR shall also be complied with for the storage and handling of PCB's, including:
 - (i) labeling and marking of containers
 - (ii) marking each container with the date accumulation BEGINS
 - (iii) removing all hazardous wastes within 90 days.

(ST14/K1)

PERSONNEL TRAINING PLAN

STORES DEPARTMENT PERSONNEL TRAINING PLAN HAZARDOUS WASTE AND MATERIALS

May 15, 1981 Revised April 15, 1983

1.0 PURPOSE

To provide for the training of Stores Department employees in the proper handling procedures to prevent harm to human health and the environment from hazardous waste and materials in accordance with 310 CMB 30.516.

2.0 APPLICABILITY

This training plan applies to all Stores Department employees involved in the receipt, storage, issue and transportation of all hazardous waste and materials. The requirements of this plan are mandatory for all personnel engaged in the handling of hazardous waste and materials.

Personnel new to the facility will not work in unsupervised positions until they have completed this training program. All facility personnel will complete this program within six (6) months of their employment or their being reassigned to a position new to them at the facility.

3.0 RESPONSIBILITIES

- 3.1 The Stores Department Superintendent will be responsible for:
 - 3.1.1 Implementing the training plan.
 - 3.1.2 Reviewing the plan and amending it when required.
 - 3.1.3 Assigning necessary personnel to provide training.
 - 3.1.4 Requiring personnel to take part and attend various seminars regarding hazardous waste and materials.
- 3.2 The Stock Division Head will be responsible for:
 - 3.2.1 Receipt, handling, storage and disposal of hazardous wastes and materials.
 - 3.2.2 Assignment of trained personnel and maintaining training records.
- 3.3 The Shops Division Head will be responsible for:
 - 3.3.1 Repairing and testing equipment containing hazardous materials, including draining such equipment as needed.
 - 3.3.2 Assignment of trained personnel and maintaining training records.
- 3.4 The Trucking Division Head will be responsible for:
 - 3.4.1 Handling and transporting hazardous wastes and materials.
 - 3.4.2 Assignment of trained personnel and maintaining training records.

4.0 RECORDS

A record of all persons trained, with the type and amount of training, will be maintained in each Division office, at the Watertown Materials Management Complex until closure of the facility. A copy of the record form is attached as Exhibit #4.0-A.

5.0 TRAINING REQUIREMENTS

The degree of training varies depending on work assignment and work location, as follows:

5.1 Orientation

All new and/or transferred employees must be advised of the safety and special handling procedures detailed in Stores Practice #1-13, copy attached as Exhibit #5.0-A. Included are prohibitions against operating equipment or handling hazardous materials or wastes until specifically qualified after further training, as described below in 5.2 through 5.6.

Job titles for each position @ facility related to hazardous waste management are listed below:

Manager - Materials Management

Division Head - Stock Division

Division Head - Trucking Division

Division Head - Control Shop Division

Stockkeeper Truck Driver

Truck Driver - Helper

Mechanic

5.1.2 Job descriptions for each of the above are attached as Exhibit 5.0D.

5.2 Duty Supervisor Training

All management personnel who act as Stores Supervisors during off-regular hours are also trained on their responsibilities for containing and reporting spills as described in the contingency portion of this plan and in Stores Practice No. 11-11, attached as Exhibit #5.0-B.

5.3 Handler Training

All stockkeepers, truck drivers, mechanics and helpers, before being permitted to operate equipment near or to handle hazardous wastes or materials, must first be trained and certified as qualified on all procedures applicable to the specific substance, as indicated in the training record, Exhibit 4.0-A and as follows:

5.3.1 Facility Operations

- a) The use, inspection, repair, and replacement of facility emergency and monitoring equipment if applicable.
- b) Communications and alarm systems
- c) Response to fire or explosions
- d) Response to surface water contamination incidents
- e) Shutdown of operations if required
- f) checking and recarding of tank monitoring guages.
- 5.3.2 Solvents, acids and other toxics as covered in Exhibit #5.0-B.
- 5.3.3 Oil (also covered in Exhibit #5.0-B).
- 5.3.4 Compressed gases (also covered in Exhibit #5.0-B).
- 5.3.5 PCBs, as shown in Exhibit #5.0-B; also Stores Practice No. 11-8 attached as Exhibit #5.0-C.

5.4 Refresher Training

Supervisors of any employees described in 5.3, above, will include instructions in hazardous materials and wastes at least once a month in weekly safety meetings.

5.5 Supervisory Training

Division Heads and supervisors in the Shops, Stock and Trucking Divisions, in addition to all training shown in 5.1 through 5.4, above, will be trained on all provisions of the over-all Stores Department Preparedness and Prevention Plan.

5.6 Special Training

We anticipate the wastes and materials we presently handle will not require special training, but if the need should arise because of the introduction of new and/or special hazards, necessary special training will be provided and will be included in this plan.

5.7 <u>Instructor Training</u>

- 5.7.1 The training instructor will attend such seminars as required to become proficient and qualified to instruct. Such seminars will provide certification of qualification.
- 5.7.2 The training instructor will become familiar with Federal and State regulations, laws and publications pertaining to the handling, storage and disposal of hazardous wastes and materials.

5.8 All facility personnel involved in hazardous waste management will take part in an annual review of the initial personnel training plan.

STORES DEPARTMENT RECORD OF TRAINING AND QUALIFICATIONS FOR HANDLING HAZARDOUS WASTES AND MATERIALS

Name	Employee Number	Di	vision	
	nitial as having received a copy of Stores Practices, where applicable. Instru nonstrating safe handling procedures for the specific substance.	ctor is to initial as 1	having trained and obs	served
Applies To *	Specific Type of Training	Trainee Initial	Instructor Initial	Date Qualified
(AII)	Orientation: Form X-5228 completed. Rec.d St. Pr. No. 11-11.			
S/B/M/T	Handling Asbestos Wastes St. Pr. No. 1-14			
S/B/M/T	Handling Solvents, Acids & Other Toxics			
S/B/M/T	Handling Items Containing Oil			
S/B/M/T	Handling Compressed Gases			
S/B/M/T	Handling Items Containing Askarel/PCB's. Rec'd St. Pr. No. 11-8.		-	
S	Stores Department Preparedness & Prevention Plan			
S/B/M/T	Spill Contingency Plan			
S/B/M/T	DOT and EPA Labelling, Packing, Placarding, Shipping, Etc. Requirements St. Pr. 11-11, Par. 6c			
S/B/M/T	Vehicle Operations Safety and Cleaning			. ,
S/B/M/T	Spill Procedures St. Pr. 11-11, Par. 8	· · ·		
S/B/M/T	Familiarity with Emergency Response Guidebook for Hazardous Materials Published by DOT - St. Pr. 11-11, Par. 6D			
S/B/M/T	Familiarity Phase I Hazardous Waste Regulations & Federal PCB Federal PCB Regulations 40 CFR 761			
S/B/M/T	Facility Operations, Emergency Equipment, Alarms, Contamination, Shutdown Etc.			
*Applicability: S	All Supervisors and Division Heads, Shops, Stock & Trucking Divisions			

B - Stock Keepers
M - Mechanics

n Heads, Shops, Stock & 1 rue
D - Duty Supervisors
T - Truck Drivers & Helpers

B.E.Co. Form X6357

EXHIBIT 5.0-A

STORES PRACTICE

No. 1-13

Instructing Reassigned or New Employees

Dated: 3/31/77

General

1. This practice is to be used by all members of management in the Stores Department to make sure that all employees are properly instructed in safety procedures.

Safety Committee Chairman

- 2. Every employee upon being assigned to the Stores Department will be interviewed by the Stores Safety Committee chairman or, in his absence, by the employee's division head, who will:
 - a. Brief the employee on all items listed in Section 1 of Form X-5228, Record of Safety Instructions.
 - b. Issue a copy of all applicable instructions listed in Section 2 of Form X-5228 to the new employee, who is to initial for each one received.
 - c. Complete Section 1 of that form in two copies and have the employee take both copies directly to the supervisor.

Supervisors

- 3. Every employee being newly assigned to a division, or reassigned to a different work location for the first time in a year, shall be instructed on all items in Section 3 of Form X-5228 by the supervisor, who shall also:
 - a. If the employee is new in the Department, see that Sections 1 & 2 of the Form X-5228 has been completed, complete Section 3 of both copies, file the original and send the copy to the division head.
 - b. If the employee is being reassigned to a different work location within the Department, either temporarily or permanently, for the first time in more than a year (including reassignments such as to Inventory which involve a changed work environment) see that the employee has a copy of all applicable instructions listed in Section 2 of Form X-5228, complete Sections 2 and 2 of that form, file the original and send a copy of the division head.

Division Heads

4. Division Heads will see that Forms X-5228 are being prepared for all new and reassigned employees and will maintain a file copy of those forms for reference in case originals are misplaced.

Distribution: S

Superintendent Stores Department

STORES DEPARTMENT RECORD OF SAFETY INSTRUCTIONS

SECTION I	
Employee's Name:	Date:
Employee has been briefed on:	(check √)
(1) The concern we all share for each employee's safety.	
(2) General job hazards in the Stores Department.	
(3) Importance of protective clothing and equipment.	-
(4) Importance of studying the instructions below.	
Briefed By: (s	sign)

SECTION 2

Employee has received instructions as initialed:

Stores Practices:	Stock Keepers	Truck Drivers, Helpers	Shops Division Mechanics	Office Employees	Inspectors & Inventory
1-5 Vehicle Accidents					
1-9 Eye Protection	·	>			> <
1-10 Use & Care of Slings					
1-11 Using Ladders		$\overline{}$			
1-12 Reporting Any Incident					****
1-15 Housekeeping & Storage					
1-16 Protective Gear					
2-5 Control of Visitors					
11-1 Handling Poles, Pipe, Etc.					
11-8 Handling PCB					
11-11 Hazardous Items & Pollutants					\
A.P. Manual & Section 11					

Routine: See Stores Practice No. 1-13

SE	CT	Ί	0	N	3

Emplo	yee has been instructed by his new supervisor on:	(check ✓)
(1)	Tour of the employee's new working area.	
(2)	Duties and all hazards of the new job.	
(3)	Not to operate or tamper with powered equipment until trained and approved to operate it.	
(4)	How to lift, when and how to get help lifting.	
(5)	Review of all portions of Section 11 of the APM and safety practices, emphasizing those applicable to the job location.	
(6)	Assign to work with another employee familiar with safe practices for the area, to observe and guide the new employee safely.	-
	•	
Supervi	sor's Signature: Date:	

EXHIBIT 5.0-B

STORES PRACTICE

No. 11-11

Hazardous Materials

Dated: 3/20/81 Revision: 4/14/83

General

This practice is to be used by Stores Department duty supervisors and by 1. all members of the Shops, Stock and Trucking Divisions to prevent and contain leaks or other spills where potentially hazardous products or wastes are stored or handled. The objective is to insure the protection of human health and the environment. (This practice does not apply to asbestos, which is covered in Stores Practice No. 1-14).

Scope

- 2. This practice applies when handling, storing, transporting or disposing of any potentially hazardous substance. Such substances which are likely to be encountered in this Department are:
 - PCB materails and wastes. (Stores Practice No. 11-8 also applies.) a.
 - b. Solvents, acids and other toxics. (Any substance in drums or cans shall be considered toxic unless specifically exempted by the Division Head responsible for its handling.)
 - c. Oil, including that contained in:
 - (1)Bulk storage and reclamation systems and oil tanker-trailers.
 - (2) Drums and cans.
 - (3) Transformers, regulators, oil switches, breakers and other materials containing oil.
 - d. Any other substances which may be so designated by any level of government agency.
 - e. Wastes contaminated by any of the above, including:
 - Empty containers of those substances.
 - Residues such as spent filter clay, speedi-dry, rags, absorbents, water, solvents, etc., used for cleaning or processing such substances or materials.
 - Soil and recoverable water contaminated by leaks or other spills of those substances.
 - f. All compressed gases, including "empty" cylinders.

Exhibit #5.0-B

Supervisory Responsibilities

3. Supervisors of any activities in this practice are responsible for knowing the Department plans for training employees and inspecting these materaisl and substances in storage. Stores duty supervisors must also know where to find a copy of the Department contingency plan for spills.

Receiving

- 4. Stock keepers receiving material with any hazardous label shall bring this to the Supervisor's attention for possible special handling or storage.
 - a. The Stockkeeper shall insure that the material is also properly dated.

Authorized Handlers

5. Only those employees who have been trained and designated by their supervisor as so qualified shall be permitted to handle any material or substance included in para. 2, or to operate a vehicle or power-driven equipment within 10 feet of such material.

Transporting and Moving

- 6. All hazardous materials must be handled with extreme caution.
 - a. On trucks, these materials shall be tied off sufficiently to insure that they cannot shift or topple even under stresses such as emergency braking or hitting potholes. Applicable hazard placards shall be displayed.
 - b. With lift trucks, be sure that drums, cans, etc. are stable on the pallet, using bands if necessary. Tie tall, slender or unstable loads, such as regulators, to the fork mast.
 - c. Material must be properly packaged, labeled, and manifested in accordance with current DOT regulations.
 - d. All vehicles transporting hazardous waste must:
 - i Be properly licensed and placared.
 - i Possess copy of BECo spill plan Stores Practice 11-11
 - iii Possess latest copy of DOT emergency response guide book for hazardous materials.

Storage

- 7. Hazardous materials and substance shall be stored only in the areas so designated.
 - a. Truck drivers or helpers shall not unload such materials in any stock area until a stock keeper is present to see that it is put in the proper location.

- b. In the case of compressed gases, each gas shall be kept in its designated bay. This is essential to maintain safe separation of such non-compatibles as oxygen and acetylene. All empty cylinders shall be stored outdoors, in designated areas.
- c. All liquids in storage tanks shall be monitored and recorded daily to insure no tank leakage.

Containing Spills

- 8. The following instructions apply for any items described in para. 2, except compressed gases:
 - a. Sets of protective gear, equipment and speedy-dry shall be reserved for spill at each location where such materials are stored.
 - b. In case of any leak or other spill, the area supervisor or division head shall be notified immediately. Off-hours, notify the duty supervisor, who can be contacted through the shift stock keeper.
 - c. The supervisor must take immediate and appropriate action to see that the spill is contained, and notify the emergency coordinator. (See the Department plan for spills and contingencies.)
 - d. Outdoor "portable" spill kits will be assembled by the Stock Division. When available, one of these kits will be carried on every Trucking Division truck and one kept in each yard zone at Watertown where items containing oil or PCB's are stored. These kits can contain only leaks and fairly minor spills. The supervisor must augment them with speedydry from stock for heavier spills.

Collection and Disposal of Wastes

- 9. Hazardous or polluting wastes, cleaning residues, etc. shall be collected only in containers designated for the specific type of waste and shall be stored in the so-designated area until turned over to an approved contractor licensed to dispose of such wastes.
 - a. The date that each period of accumulation <u>begins</u> shall be clearly marked oneach container.

Superintendent Stores Department

Distriubtion: B-C-M-S-X

EXHIBIT 5.0-C

STORES PRACTICE

No. 11-8

Handling PCB - Material and Wastes

Date: 3/20/81 Revised: 1/14/83

General

1. This practice is to be used by all supervisors and employees of the Trucking, Stock and Shops Divisions involved in handling PCB items or wastes to assure that the handlers and the environment are protected with a margin of safety. Stores Practice No. 11-11 also applies to PCB's as well as to other potentially hazardous products.

Definitions

- 2. Terms used here are defined as follows:
 - a. "PCB and PCBs" refer to any chemical substance and combination of substances that contain 50 PPM or greater of PCB.

Any chemical substance and combination of substances that contain less than 50 PPM of PCB because of any dilution shall be included unless otherwise specifically provided.

- b. "PCB Article" means any manufactured article, other than a PCB container, that contains PCBs and whose surface(s) has been in direct contact with PCBs includes capacitors, transformers, piping, motors, pumps.
- c. "PCB Article Container" means any package, can, bottle, bag, barrel, drum, tank or other device that contains PCB articles or PCB equipment and whose surface has not been in direct contact with PCBs.
- d. "PCB Equipment" means any manufactured item other than PCB container or a PCB article container, which contains a PCB article or other PCB equipment and includes electronic equipment, fluorescent lamp ballasts or material.
- e. "PCB Item" is defined as any PCB article, PCB article container, PCB container or PCB equipment that deliberately or unintentionally contains or has as a part of it any PCB or PCBs at concentration of 50 PPM or greater. (This includes all items in para. 2 b, c, d and f.)
- f. "PCB Transformer" means any transformer that contains 500 PPM or greater.

"PCB Contaminated Transformer" - means any transformer that contains 50 PPM of PCB but less than 500 PPM PCB.

Exhibit #5.0-C

- g. "PCB-Contaminated Electrical Equipment" means any electrical equipment, including but not limited to transformers, capacitors, circuit breakers, reclosers, voltage regulators, switches (including sectionalizers and motor starters), electromagnets, and cable, that contain 50 ppm or greater PCB, but less than 500 ppm PCB. Oil-filled electrical equipment other that circuit breakers, reclosers, and cable whose PCB concentration is unknown must be assumed to be PCB-Contaminated Electrical Equipment.
- h. "Disposal" means to intentionally or accidentally discard, complete or terminate the useful life of PCBs or PCB items. Disposal includes spills leaks and other uncontrolled discharges of PCBs as well as actions relating to, contining, transporting, destroying, decontaminating or confining PCBs and PCB items.
- i. "Storage for Disposal" means temporary storage of PCBs that have been designated for disposal.
- j. "PCB Waste" means PCBs for disposal and any substance which has been contaminated by PCBs including rags, clothing, soil, solvents, absorbents, etc.
- k. "PCB Label" means the approved label carried in stock under code 659716.
- 1. "PCB Handlers" Stores Department employees who transport, handle or may otherwise come in contact with PCB items or wastes. Only employees so qualified and approved by their Division Head shall be permitted to handle any such PCBs.
- m. "Potential PCB Leaker" Any PCB item that has been damaged or is in any possible danger of leaking or becoming externally contaminated by PCBs.

Accepting Returns

- 3. Returns shall not be accepted by any unit of the Stores Department unless they meet the following requirements:
 - a. PCB items must have a PCB label attached and be listed on a proper warrant or requisition showing:
 - (1) Date removed from service.
 - (2) Weight or gallons of PCB, if this can be determined.
 - (3) Stock or "E" number of the material.
 - b. PCB <u>waste</u> is to be listed on a return requisition showing the estimated weight or gallons and description of contents. The container shall:
 - (1) Have a PCBs label attached.
 - (2) Show contents and date removed from service.
 - (3) Show location and stock or "E" number from which it was removed.

- c. A potential PCB leaker must, if possible, be in a hazardous waste drum (code 023535) labeled as shown for PCB waste. No other types of drums shall be used. The drum must also contain six inches of an absorbent such as Speedy Dry with one item or ten inches for more than one item.
- d. Any leaking item too large to fit into drums must not be transported until it is in a catch pan containing sufficient absorbent such as Speedy Dry. In addition the item must either be plugged to contain the leak or be drained of all liquid. The Shops Division will assist T&D crews in draining such items. Catch pans must not be exposed to rain.
- e. Capacitors packaged by any of those methods shall be handled as PCB waste. In addition to the data shown in para. 3b, their size and quantity must be shown on the return requisition.

Handling PCBs in Transit or Storage

- 4. After being accepted by any unit of the Stores Department, PCB items or wastes shall be handled as follows:
 - a. Records of all data reflected on the return, as shown in paragraph 3, shall be maintained in each involved Division Head's office. This record shall also include data to trace the return every step including leaving the Division. In the case of the Stock Division, this will include details of its turn-over to the approved disposal contractor.
 - b. If the PCB item or waste does not conform to the requirements of paragraph 3, it shall be corrected immediately by the holder before moving. For example, if it becomes a potential PCB leaker in transit, it shall not be moved or be accepted by the Stock Division until actions shown in paragraph 3, c are taken. In any such cases, the PCB handler's supervisor shall be notified immediately. Off-hours notify the duty supervisor. The supervisor will direct the clean-up and report the incident to that Division Head.
 - c. When transporting any PCBs, display the approved PCBs sign on all four sides of the vehicle. Secure the item in a way that will prevent any possible damage, leak or exposure of PCBs.
 - d. Store PCB wastes only in the indoor area designated for PCB "Storage for Disposal".

Precautions in Handling

- 5. To prevent a possible itching rash in case of allergy to PCBs, when working with these items, PCB handlers shall:
 - a. Avoid prolonged breathing of PCBs in a confined area. Complete all work without delay as soon as PCB is exposed to air to prevent it becoming tacky, which will prolong cleaning time.

- b. Avoid direct contact of PCBs in eyes or skin. If splashed in eyes, wash them thoroughly with large amounts of clean water and get medical attention immediately. In case of skin contact, wash with soap and water; do not use a waterless cleaner.
- c. Wear the following protective gear and then process it as shown:
 - 1) Approved goggles (stock code 605107) or face shield (code 608843) PCB Respirator (code 630031) and safety hat. Clean with Solvent "A" (code 608378) then handle the rag and solvent as PCB waste.
 - 2) Approved boots (code 601225), Jackets (codes 605614-605615), pants (codes 607566-607567), and gloves (code 604932). Dispose of as PCB waste.
- d. For cleaning contaminated items, use only Solvent "A" (code 608378) or equivalent. Do not use other solvents such as chlorothene, mineral spirits, etc. Handle all residue and contaminated items as PCB waste as shown in paragraphs 3 and 4.
- e. Spills shall first be absorbed with an absorbent such as Speedy-Dry (code 600065) then cleaned with rags and Solvent "A". Handle these residues as PCB waste.
- f. Spills on trucks shall first be absorbed with an absorbent such as speedy-dry (code 600065) then cleaned with rags and Solvent "A" (code 608378). Handle these residues as PCB waste.
- g. When work is completed, any equipment used such as pumps, hoses, etc., shall be cleaned and dried immediately, using rags and Solvent "A". Handle these residues as PCB waste.

Handling Re-Usable PCBs (Askarel) and PCB Items

- 6. Askarel and PCB transformers, capacitors, regulators, etc., in the Stores Department being received, tested, repaired, transported or stored for issue or reuse shall be handled as described previously. In addition:
 - a. Test or repair indoors and only in the areas designated for PCB work.
 - b. Store only in areas designated for such items.
 - c. Accept returns in accordance with Stores Practice No. 14-1. If designated for test or repair, send the original credit requisition or warrant with the items to the shop.
 - d. When test or repair is completed, send a copy of a completed credit to the Stock Division Head. For items failing test or beyond repair, process as described for PCB material or waste.
 - e. For issue or transfer of PCBs or PCB items, comply with Stores Practice No. 12-4. Also send a copy of the completed requisition or warrant to the Stock Division Head.

Contingency Plans

7. Division heads and supervisors shall be familiar with and know where to find a copy of all Stores Department plans for contingencies and spills of any hazardous substance. Duty supervisor responsibilities are covered in Stores Practice No. 11-11.

Distribution: B-C-M-S

Superintendent Stores Department JOB DESCRIPTIONS

POSITION DESCRIPTION

HEAD MATERIALS MANAGEMENT CENTER

SCOPE:

The Head of the Materials Management Center has overall, day-to-day, administrative responsibility for the Materials Management Center and the following divisions of the Stores Department which are headquartered at the center:

Stock Division - (Operates Stockrooms at 7 Service Centers and 3 Generating Stations)

Shop Division

Trucking Division - (Trucking and Medium Rigging includes Job-Site Deliveries on a Company-Wide Basis)

He has overall responsibility for the security and safe operation of the center and is responsible for the scheduling and coordination of warehousing, repair, test, trucking and fabrication operations conducted at the Materials Management Center.

QUALIFICATIONS:

.....

- 1. Must be a technically oriented administrator as evidenced by successful completion of engineering or business education at the Bachelor Degree level enhanced with additional courses in the nondegree discipline at a collegiate level. Should have three to five years experience as administrative head of a work group with evidence of prior work experience or practical knowledge in a technical field or one of the skilled crafts utilized in the shop.
- 2. Must demonstrate an ability to communicate and present ideas clearly and concisely, both orally and in writing, and be able to operate comfortably in a field-shop environment.

POSITION SUMMARY:

The Head of the Materials Management Center will report to the Superintendent of the Stores Department.

The following three Division Heads will report to the Head of the Materials Management Center:

- 1. Head of the Stock Division
- 2. Head of the Trucking Division
- 3. Head of the Shop Division

The Head of the Materials Management Center must coordinate activities with the Head of the Testing and Standards Section, Engineering Planning and Research Department, the Head of the Meter Service Division, Transmission and Distribution Department, and the heads of various operating divisions who might require shop services.

The Head of the Materials Management Center will act without prior approval from his superiors on all day-to-day matters involving scheduling and coordination of activities, personnel matters involving Stores Department employees at the center, and overall security and safety of the center. In all such matters, the Superintendent of the Stores Department should be informed after the fact in accordance with operating procedures and established practices. It is the responsibility of the Head of the Materials Management Center to establish reporting and control procedures to insure good management and the safeguarding of company resources in the areas under his overall control.

Matters relating to annual operating budgets, capital expenditures, broad policy and personnel additions will be submitted to the Superintendent of the Stores Department for his approval, or for routing to a higher approving authority before taking action or committing funds.

Exempt Job Description

POSITION:	Division Head	JOB CODE:	242
DIVISION:	Stock Division	APPROVALS:	
DEPARTMENT:	Stores		
ORGANIZATION:	Accounting, Procurement and Service	DATE: Septe	mber 3, 1980

NOTE:

Statements included in this description are intended to reflect in general the duties and responsibilities of this classification and are not to be interpreted as being all inclusive.

A. JOB SUMMARY:

This position is accountable for the effective administration of the division through receipt, storage and issuance of materials and supplies as needed by Company departments.

B. NATURE AND SCOPE:

This position reports to the Superintendent of the Stores Department who, in turn, reports to the Director of Stores and Services. The positions reporting to the incumbent are the Senior Stock Supervisor, the Stock Supervisor and the Yard Supervisor.

The Stores Department is composed of three divisions, the Material Control and Records Division, the Stock Division and the Trucking Division.

The Stock Division's functions are to receive, store and issue all materials, accept returns, relaim oil, process salvage and scrap, maintain Stores equipment and repair or fabricate certain stock items. The division operates stock areas at the Operations Center, six overhead centers and three generating stations. At most of those locations, they are also in charge of disposal of rubbish and certain other wastes recently classified as hazardous.

The incumbent should possess good managerial skills in order to effectively administer the division. Good communication and interpersonal skills will aid the incumbent in coordinating the division's activities within those of Company departments requesting the services of the division.

With the passage of various federal laws and regulations, since the latter part of the 1960's, this position has been deeply involved in ensuring that the Company properly carries out the requirements of the laws as specificed. It is, therefore, important that the incumbent possess a working knowledge of government regulations regarding hazardous wastes. It is

B. NATURE AND SCOPE (Cont'd):

also necessary for the incumbent to possess the U. S. Department of Transportation Certificate entitled "Transportation of Hazardous Materials" and Certificate 40CFR264.16 and 40CFR265.16 concerning storage and disposal of hazardous material.

C. PRINCIPAL ACCOUNTABILITIES:

- 1. Ensures effective cost control through preparation and administration of the division's budget.
 - -- investigates and studies monthly expense runs.
 - -- studies methods and procedures to reduce costs.
 - -- forecasts, plans and organizes expenditures.
 - -- determines division priorities.
 - -- monitors expenditures within the budget.
- 2. Develops and maintains an efficient and productive workforce through personnel management.
 - -- evaluates personnel.
 - -- determines division's personnel requirements.
 - -- recommends training or trains personnel.
 - -- plans and coordinates work schedules.
- 3. Ensures efficient operations through the development and maintenance of adaptably innovative work procedures and standards.
 - -- keeps productivity records.
 - -- anticipates changes in workload and emergencies.
 - -- keeps up to date on emergency plans.
- 4. Provides a safe environment for personnel through the development of safety standards.
 - -- develops and conducts job safety analysis.
 - -- provides safety training.
 - -- attends safety seminars and meetings.
 - -- keeps up to date on federal/state safety regulations.

C. PRINCIPAL ACCOUNTABILITIES (Cont'd):

- Ensures a safe environment for both customers and personnel through the proper disposal of hazardous waste.
 - -- studies and investigates disposal alternatives
 - -- observes federal regulations.
 - -- maintains records and data on wastes.

D. <u>DIMENSIONS</u>:

Value of Plant and Equipment Used	\$1,000,000
Budget	\$1,700,000
Total Staff Reporting	67
No. Exempt	6
No. Non-Exempt	61
Inventory	\$23,000,000

Exempt Job Description

POSITION:	Division Head	JOB CODE:	242
DIVISION:	Trucking	APPROVALS:	
DEPARTMENT:	Stores		·
ORGANIZATION:	Accounting, Procurement and Service	DATE: Sept	ember 3, 1980

NOTE:

Statements included in this description are intended to reflect in general the duties and responsibilities of this classification and are not to be interpreted as being all inclusive.

A. JOB SUMMARY:

This position is accountable for the effective administration of the division and for ensuring the timely transport of materials throughout the Company.

B. NATURE AND SCOPE:

This position reports to the Superintendent of the Stores Department. The Superintendent, in turn, reports to the Director of Stores and Services. Reporting to this position is the Supervisor of the Trucking Division, who is responsible for supervising the operation of the division.

The Stores Department is composed of three divisions, the Material Control and Records Division, the Stock Division and the Trucking Division. The Trucking Division operates 12 trucks to transport material between stock locations and to and from job sites, all other Company locations and outside repair facilities, handles light and medium rigging work, and arranges for heavy and special vehicles and rigging services beyond in-house capabilities.

The intumbent should possess good managerial skills in order to effective-administer the division. Since the division is responsible for the transport of equipment, materials and hazardous materials it is necessary for the incumbent to possess a Massachusetts Class I drivers license and the U. S. Department of Transportation Certificate entitled "Transportation of Hazardous Materials." Besides ensuring the efficient operation of the division, the incumbent must ensure the safe operation of the division to protect the public and Company personnel and equipment, therefore, he/she should have a working knowledge of government and Company safety regulation and procedures. The incumbent must exercise independent judgement in or we to decide if work should be done by Company personnel or by outside contractors. Good interpersonal and oral communication skills will greatly aid the incumbent in interacting with contractors who provide

B. NATURE AND SCOPE (Cont'd):

a variety of services to the Company and with all Company departments who receive shipments via the Trucking Division.

C. PRINCIPAL ACCOUNTABILITIES:

- 1. Ensures effective cost control through preparation and administration of the division's budget.
 - -- forecast, plans and organizes expenditures.
 - -- determines division priorities.
 - -- monitors expenditures within budget.
 - -- investigates variances on cost area reports and revised budget when necessary.
- 2. Develops and maintains an efficient, productive workforce through human resource management.
 - -- enforces absence guidelines, using disciplinary action when necessary.
 - -- determines division's personnel requirements.
 - -- recommends promotions or hiring of new staff.
 - -- trains, re-trains and recommends training for personnel.
 - -- develops and monitors work schedules.
- 3. Ensures efficient operations through administration of the division by planning the transport of materials and equipment.
 - -- utilizes graphs and charts to monitor operation trends.
 - -- minimizes lost time in transport.
 - -- determines rail and overland routes to and from various operating stations.
 - -- determines the priority of each shipment.
- 4. Ensures safety in all phases of operations through knowledge and enforcement of safety standards.
 - -- instructs personnel and safety standards.
 - -- ensures radio control of trucks for speedy contact in emergency situations.

C. PRINCIPAL ACCOUNTABILITIES (Cont'd):

- 5. Ensures adherance and compliance with regulations concerning the transport of hazardous materials through monitoring compliance procedures.
 - -- monitors changes in regulations.
 - -- updates compliance procedures as required by changes in the regulations.
 - -- instructs all employees on the regulations.

D. DIMENSIONS:

Value of Plant and Equipment	Used	\$250,000
Budget		\$400,000
Total Staff Reporting		20
No. Exempt		1
No. Non-Exempt		19
Other Appropriate Measures	Contractors	\$300,000

Exempt Job Description

POSITION:		Division Head	JOB CODE:	
DIVISION:		Shop	APPROVALS:	
DEPARTMENT	:	Stores		
ORGANIZATI	ON:	Accounting, Procurement & Service	DATE:	
	genei	ements included in this description ral the duties and responsibilities	of this clas	to reflect in sification and

A. JOB SUMMARY:

This position is accountable for the administration of the Shop Division at the Materials Management Center. This includes the effective planning, organizing, direction, scheduling, coordinating and administration of a multi-purpose shop operation for the overhaul, repair, fabrication and testing of equipment; including major and minor operating equipment, special fixtures and fabrications plus the maintenance of Shop facilities. Insuring that adequate equipment, personnel and materials are available to provide these services is also included in these accountabilities.

Other responsibilities include the evaluation and correction of work performed by the Shop Supervisors and mechanics; the development and implementation of operating budgets and forecasts, cost control, reporting, estimates, training and provisions for a safe working atmosphere.

B. NATURE AND SCOPE:

This position reports to the Manager of the Materials Management Center, along with the Heads of the Stock and Trucking Divisions. These groups are all part of the Stores Department in the Accounting, Procurement and Service Organization. The incumbent has direct supervisory responsibility for two Supervisors and one Clerk, plus overall administrative responsibility for twenty-seven (27) Mechanics and Mechanic Helpers.

The Shop Division's functions are the maintenance, repair, assembly, fabrication and testing of various electrical, mechanical, hydraulic and pneumatic equipment used in all areas of the Company. A general knowledge of this equipment and a detailed knowledge of the techniques and skills utilized during the service and repair of the equipment is necessary for this position.

The duties are both administrative and supervisory in nature, and require good oral and written communication skills; plus a good knowledge of management techniques for forecasting, budget preparation, scheduling and work measurement.

The ability to interface with all areas and levels of personnel within the Company is necessary to effectively accomplish the various functions of the Division.

B. NATURE AND SCOPE: (Cont'd)

The incumbent must have a good working knowledge of Company and Department policies, various Union-Management agreements, plus an ability to make operating and technical decisions regarding Division activities.

C. PRINCIPAL ACCOUNTABILITIES:

- 1. Administer the activities of the Division to accomplish scheduled and unscheduled work on a 24 hour basis.
 - -- fabricate special tools and equipment for use by field crews throughout the system
 - -- construct accurate detailed scale models of power equipment and facilities
 - -- heat treat metals
 - -- inspect and repair fork trucks, cranes, dockboards and other material handling equipment
 - -- construct special test equipment, test jigs and test set ups
 - select materials and execute shop designs on the basis of sketches and/or performance specifications
 - -- maintain Shop equipment in proper operating condition
 - -- repair and service instruments, tools, pumps, blowers, compressors and other equipment
 - -- overhaul, repair, refurbish and test power equipment, including transformers, regulators, switches, reclosures, etc.
 - -- test new equipment for evaluation purposes
 - -- test rubber protective safety equipment
 - -- conduct factory inspections of new equipment to determine compliance with specifications
 - -- install and remove radio/communications equipment in vehicles
 - -- construct/fabricate special tools and devices
 - -- test and repair combustible gas and oxygen analyzers
 - -- perform field repairs and modifications to installed equipment in the vicinity of live high voltage lines
 - -- maintain adequate stock, parts, tools and equipment
 - -- meet with Division/Company personnel to schedule and expedite priority items
 - -- perform welding, metal spray and blacksmith operations
 - -- perform precision machining operations
 - -- perform carpentry, woodworking, cabinet making and repair services
- 2. Develop and establish repair, fabrication and testing procedures to insure efficient and up to date performance.

C. PRINCIPAL ACCOUNTABILITIES: (Continued)

- -- review existing procedures and operations for improvement
- -- assure compliance to various regulatory requirements
- -- investigate new equipment and methods
- -- make periodic economic evaluations of various operations
- -- perform technical evaluations for the repair and/or replacement of equipment
- -- design and construct special devices and equipment
- -- make physical property evaluations of materials and systems for shop and system use
- -- provide consultation and shop services to all areas of the Company
- 3. Develop work measurement and productivity standards.
 - perform productivity studies, including the development of productivity systems
 - -- maintain work measurement data
 - -- review and update productivity measures to insure validity
 - -- make periodic productivity audits
 - -- prepare productivity reports
 - -- conduct annual evaluations of all Division personnel
- 4. Develop and prepare Division budgets, cost control.
 - -- analyze Company/Division goals, projects and expenses
 - -- develop and forecast a five year cost projection for personnel, materials and capital expenditures
 - -- develop annual work load and personnel requirements
 - -- develop an annual budget including personnel, materials and equipment
 - -- perform monthly audits of Division operations, including review of monthly run-off and investigation of variances
 - -- review monthly and yearly work schedules to reduce overtime
 - -- review operating expenses for reductions and improvements
- 5. Provide a safe working environment.
 - -- hold frequent safety discussions to develop a safe working atmosphere
 - -- hold Monthly Division Safety Meetings
 - -- hold Monthly Area Safety Meetings, including both union and supervisory personnel
 - -- insure that all personnel are trained on the safety related aspects of their work.

C. PRINCIPAL ACCOUNTABILITIES: (Continued)

- -- make periodic safety audits to insure that Company, Department and Division safety policies are being followed
- -- make frequent reviews and updates on pertinent federal/state safety regulations
- 6. Provide technical training for all Division personnel to ensure a productive and efficient work force.
 - -- develop and present training programs to all levels of Division personnel
 - -- prepare and initiate supervisory development programs for pertinent personnel
 - -- insure availability of operating procedures for all equipment
 - -- maintain a training history for all personnel

D. DIMENSIONS:

Annual Budget
Equipment Inventory

Supervises:

Supervises:

Directly Indirectly \$850,000 \$1.5M

2 Supervisors, 1 Clerk

27 Mechanics, Mechanic-Helpers

Scope:

Shop Size -

53,000 ft²

Material Handling - 2-25 Ton Travelling Cranes

3 - 5 Ton Jib Cranes Overhead Monorail Systems

Multi-Station Air Bearing System

Fork Trucks

Specialty Areas - Cover Burning, Sand Blast, Spray Paint, Weld-

ing, Carpentry, Machine Shop, Blacksmith Area

E. MINIMUM QUALIFICATIONS:

- -- Assoc. Degree in Engineering or Business, or the equivalent in substantial, responsible shop experience in the field of electrical equipment test and repair, supplemented by evidence of formal education in english, mathematics and shop mechanics
- -- additional courses in shop related work
- -- 5 years "hands on" experience in shop work
- -- 5 years experience in a supervisory capacity
- -- effective managerial skills, including work scheduling and prioritization, oral and written communication, personnel administration
- -- detailed knowledge of Company, Department and Division policies and practices
- -- ability to express thoughts clearly, both verbally and in writing
- -- demonstrated ability to supervise and direct personnel, including scheduling and prioritization of assignments

Exempt Job Description

POSITION:	Senior Stock Supervisor	JOB CODE: _	845
DIVISION:	Stock	APPROVALS:	
DEPARTMENT:	Stores		
ORGANIZATION:	Accounting, Procurement & Service	DATE:	December 11, 1980

NOTE:

Statements included in this description are intended to reflect in general the duties and responsibilities of this classification and are not to be interpreted as being all inclusive.

A. JOB SUMMARY:

This position is accountable for supervising Stock Division Warehousing activities particularly in the areas of salvage and scrap storage and resale at Operations Center Buildings #2 and #11 and at the Materials Management Center.

B. NATURE AND SCOPE:

This position reports to the Stock Division Head, as do the Yard Supervisor, the Stock Supervisors and two other Senior Stock Supervisors. The Division Head reports to the Manager of the Materials Management Center, who in turn, reports to the Stores Department Superintendent. This position supervises several stockkeepers of various grades, who perform warehouse tasks as supervised. The Stores Department monitors Company material needs and inventories, ordering, receiving, inspecting, storing, issuing and transporting materials needed for Company operations. The Stock Division receives, stores and issues all materials, accepts returns, reclaims oil, processes salvage and scrap, maintains Store Department equipment and repairs or fabricates certain stock items. The Division operates stock areas at the Operations Center, the Materials Management Center and nine other locations.

This position supervises operations at one of the Stock Division locations, overseeing receipt and storage of larger materials, particularly transformers and scrap. As a result, the incumbent must have a working knowledge of Department procedures and equipment, particularly of the large moving equipment. The incumbent must also have good personnel relations skills and the ability to set priorities and assign work in order to facilitate task completion and assist in problem solving. The incumbent must be able to administer Division activities in a manner encouraging safety, as heavy equipment is frequently operated. The incumbent in this position must be capable of independent action and decision making, particularly in personnel management, as s/he operates with minimal direct supervision.

B. NATURE AND SCOPE: (Continued)

This position is in frequent contact with the Transmission and Distribution Department as the incumbent is responsible for the receiving, storage and issuance of many items used by that Department, particularly cable and transformers. This position is in frequent contact with vendors as well as buyers of scrap materials.

C. PRINCIPAL ACCOUNTABILITIES:

- 1. Ensures operating efficiency through the supervision of the receipt, storage and delivery of materials, including scrap cable.
 - -- oversees the receipt of materials.
 - -- supervises the use of heavy moving equipment, including slings, cranes and forklifts.
 - -- identifies, handles, weighs and tags scrap cable.
 - -- coordinates stocking and efficient use of storage space.
 - -- keeps records of stock movement, inventory, etc.
- 2. Supervises the sale of scrap wire, cables and other materials.
 - -- identifies, handles, weighs and loads sold material onto buyer's truck.
 - -- supervises the use of heavy moving equipment.
 - -- schedules pick-up dates.
 - -- prepares all necessary forms and keeps records of sales.
- Promotes operating efficiency through supervision of work, personnel and procedures, consistent with Company policy.
 - -- reviews workload and scheduling needs with various departments.
 - -- sets work priorities and assigns work based on that decision.
 - -- implements and coordinates work procedures, methods and standards, revising them as appropriate.
- 4. Encourages the development of a competent and motivated work force through effective human resource management.
 - -- provides first-line supervision of Division personnel, advising, instructing and directing several stockkeepers.
 - -- conducts training programs, revising and updating them as necessary.

C. PRINCIPAL ACCOUNTABILITIES: (Continued)

- -- evaluates performance of reporting personnel.
- -- recommends hiring, firing and disciplinary action.
- 5. Promotes safety through implementation and administration of safety programs.
 - -- monitors work areas, reports and acts on unsafe conditions.
 - -- conducts and attends safety meetings.
 - -- reviews and revises procedures to ensure safety.
 - -- ensures the proper use of equipment.
 - -- keeps personnel informed of safety methods and procedures.
- 6. Assists in special projects as requested.
 - -- assists in the control and storage of hazardous wastes.

D. DIMENSIONS:

Value of Plant and Equipment Used	\$150,000	
Total Staff Reporting	10	
Number Non-Exempt	10	
Yearly Cable Inventory	Value \$2,500,000	
Yearly Spare Parts Inventory	\$1,300,000	
Yearly Scrap Sales	\$1,000,000	
Transformers	498	pieces

Exempt Job Description

POSITION:	Yard Supervisor	JOB CODE:802	
DIVISION:	Stock	APPROVALS:	
DEPARTMENT:	Stores		
ORGANIZATION	Accounting, Procurement and Service	DATE: August 4, 198	80
NOTE: State gener	ements included in this descr cal the duties and responsibi	iption are intended to refle lities of this classificatio	ect in on and

A. JOB SUMMARY:

This position is accountable for the overall operation of the Stores Maintenance Shop, Building 12, 11 and the Oil House.

are not to be interpreted as being all inclusive.

B. NATURE AND SCOPE:

This position reports to the Division Head of the Stock Division who in turn reports to the Stores Department Superintendent. The Stores Department monitors Company material needs and inventories, ordering, receiving, inspecting, storing, issuing and transporting meterials needed for Company operations. The Stock Division receives, stores and issues all materials, accepts returns, reclaims oil, processes salvage and scrap, maintains Stores Department equipment and repairs or fabricates certain stock items. The Division operates stock areas at the Operations Center and nine other locations.

The incumbent is responsible for supervising the Yard Operations which includes the loading, unloading, storing, receiving, identifying, and issuing of Stores Department material. The incumbent is also responsible for the efficient and safe operation of all Materials Handling Equipment and the Reclaiming of IOC Transporation Oil Retrune from Systems Operations.

Fifteen workers report to the incumbent, all of whom assist in the day to day operations of the Store Maintenance Shop, Building 12, 11 and the Oil House. In order to effectively superivse the Yard activities and personnel, the incumbent must have effective communication and organization skills. Because of potential work hazards the incumbent must also be able to train personnel in safety operations.

The incumbent is in frequent contact with many divisions and departments at Boston Edison regarding the receiving or delivering of stock items. The incumbent also remains in contact with various vendors and repair companies in order to coordinate repair operations or to secure necessary parts.

C. PRINCIPAL ACCOUNTABILITIES:

- 1. Maintains efficient operations through effective management.
 - -- develops and evaluates goals.
 - -- promotes maximum economic efficiency through properly utilizing personnel.
 - -- maintains and develops systems of record keeping for ongoing and future analysis.
- 2. Ensures a competent and motivated work force through effective supervision of employees.
 - -- provides inservice training for employees.
 - -- interfaces with and counsels staff.
 - -- reviews, evaluates, and records personnel performance in all phases of operation.
 - -- assesses manpower needs and allocates personnel accordingly.
- 3. Contributes to safe operations through the provision of training programs and adherence to Company policies and procedures.
 - -- participates in Department and Division seminars to discuss safety operations.
 - -- provides safety training to all personnel.
- 4. Ensures a properly maintained and efficient Fork Truck, Crane, and Material Handling Fleet through the overseeing of repair and preventive maintenance activities.
 - -- trains personnel in repair and preventive maintenance of materials handling equipment.
 - -- supervises operation of equipment.
 - -- analyzes equipment failures and rapidly determines corrective measures.
- 5. Directs storekeepers oil reclamation activites through effective supervision.
 - -- handles the reclaiming of 10C Transportation Oil returned from Systems Operations.

D. DIMENSIONS:

ITEM

AMOUNT (Annual dollars or units)

Value of Plant & Equipment Used

\$1,000,000

Exempt Job Description

POSITION:	Stock Supervisor	JOB CODE:	686	
DIVISION: Stock		APPROVALS	:	
DEPARTMENT:	Stores			
ORGANIZATION	Accounting, Procurement	& ServiceDATE:	July 28, 1980	

NOTE: Statements included in this description are intended to reflect in general the duties and responsibilities of this classification and are not to be interpreted as being all inclusive.

A. JOB SUMMARY:

This position is accountable for supervising Stock Division warehousing activities, overseeing operations and personnel involved in the receipt, storage and issuing of materials at Stock Division locations.

B. NATURE AND SCOPE:

This position reports to the Stock Division Head, as do the Senior Stock Supervisors and the Yard Supervisor. The Stock Division Head, in turn, reports to the Stores Department Superintendent. This position supervises non-exempt Stockmen and clerical personnel of various pay grades.

The Stores Department monitors Company material needs and inventories, ordering, receiving, inspecting, storing, issuing and transporting materials needed for Company operations.

The Stock Division receives, stores and issues all materials, accept returns, reclaims oil, processes salvage and scrap, maintains Stores Department equipment and repairs or fabricates certain stock itmes. The Division operates stock areas at the Operations Center and nine other locations.

This position supervises operations at one of the Stock Division locations overseeing receipt and storage of stock and non-stock materials. As a result, the incumbent must have a working knowledge of Department procedures and equipment and of Company material uses and needs. The incumbent must also have good personnel relations skills and the ability to set priorities and assign work in order to facilitate task completion and assist in problem solving. The incumbent must be able to administer Division activities in a manner encouraging safety, particularly in the moving of heavy stock equipment. The incumbent in this position must be capable of independent action and decision making, particularly in personnel management, as s/he operates with minimal direct supervision.

B. NATURE AND SCOPE (con't):

This position is in contact with other Departments in order to meet their stock needs. This position is in contact with outside vendors and trading firms to receive materials.

C. PRINCIPAL ACCOUNTABILITIES:

- 1. Ensures operating efficiency through the supervision of the receipt, storage and issuing of materials at Company stock locations.
 - -- oversees the receipt of materials.
 - -- coordinates stocking and efficient use of storage space.
 - -- keeps records of stock movement, inventory, etc.
- 2. Promotes operating efficiency through supervision of work, personnel and procedures, consistent with Company policy.
 - -- set work priorities and assigns work based on that decision.
 - -- implements and coordinates work procedures, methods and standards, revising them as appropriate.
- 3. Encourages the development of a competent and motivated work force through effective human resource management.
 - -- provides first-line supervision of Division personnel, advising, instructing and directing several stockkeepers.
 - -- conducts training programs, revising and updating time as necessary.
 - -- evaluates performance of reporting personnel.
 - -- recommends hiring, firing and disciplinary action.
- 4. Promotes safety through implementation and administration of safety programs.
 - -- monitors work areas, reports and acts on unsafe conditions.
 - -- conducts and attends safety meeting.
 - -- reviews and revises procedures to ensure safety.
 - -- ensures the proper use of equipment.
 - -- keeps personnel informed of safety methods and procedures.

C. PRINCIPAL ACCOUNTABILITIES (con't):

- 5. Promotes stock area security through implementation and administration of security measures.
 - -- performs security checks.
 - -- investigates losses of materials.
 - -- reports on security of locations.
 - -- recommends additional security measures as appropriate.

D. <u>DIMENSIONS</u>:

Value of Plant and Equipment Used \$80,000

No. of Non-exempt reporting 14

Other Appropriate Measures

1119 Inv. Items (1979)

\$62,427,972 Inv. Book Value (1979)

Exempt Job Description

POSITION:		Trucking Supervisor	JOB CODE:	751
DIVISION:		Trucking	APPROVALS:	
DEPARTMEN	Τ:	Stores		
ORGANIZAT	ION:	Accounting, Procurement & Service	DATE:	December 11, 1980
NOTE:	gene	ements included in this description ral the duties and responsibilities not to be interpreted as being all	of this cla	ed to reflect in essification and

A. JOB SUMMARY:

This position is accountable for contributing to the efficient and safe operation of the Trucking Division through the effective supervision and scheduling of the Division's personnel and equipment.

B. NATURE AND SCOPE:

This position reports to the Trucking Division Head who reports to the Manager of the Materials Management Center. He, in turn, reports to the Stores Department Superintendent. The incumbent in the position of Trucking Supervisor directly supervises the activities of Boom Truck Operations, a Tractor Trailor Operator, Truck Drivers both Grade A and B, Truck Helpers both Grade A and B, and a clerk. Through the effective supervision, direction, and scheduling of the activities of this group, the incumbent seeks to ensure the efficient and safe operation of the Trucking Division. In order to accomplish these goals the incumbent has the authority to evaluate assignments to determine personnel and equipment requirements, prioritize tasks, and adjust work routines to ensure the timely completion of specific tasks.

The primary challenge the incumbent faces is ensuring optimum efficiency from personnel and equipment while ensuring the safety of all operations. Ensuring the safety of Division employees requires more than driver and road safety as the Division's personnel are frequently called upon to move transformers weighing up to ten tons, a process requiring the use of jacks and cribbing and in confined spaces.

The incumbent's contacts within the Company are primarily concerned with the delivery and pick up of various materials, equipment and supplies. The incumbent's contacts outside of the Company are primarily for the purpose of obtaining temporary equipment and services which the Company cannot provide.

C. PRINCIPAL ACCOUNTABILITIES:

 Assists in ensuring the maintenance of a motivated and competent division staff through the effective management of human resources.

C. PRINCIPAL ACCOUNTABILITIES: (Continued)

- -- interviews and recommends for hiring employees.
- -- assigns work to and reviews the performance of employees.
- -- maintains team morale among subordinates.
- 2. Assists in ensuring the effective operation of the Trucking Division through the Supervision of Division personnel.
 - -- monitors established work routines and makes shift adjustments to ensure timely completion of tasks.
 - -- adjusts work routines to meet short-term manpower shortages, unexpected changes in plans, and emergencies.
- Assists in ensuring the efficient operation of the Trucking Division through the scheduling and direction of the transportation of materials and equipment.
 - -- reviews the needs of various groups and departments.
 - -- schedules the day to day assignments of all trucks and crews.
 - -- evaluates rigging jobs to determine personnel and equipment requirements.
 - -- monitors the locations of trucks and crews and revises instructions by radio.
 - -- reassigns personnel and equipment in system emergencies.
- 4. Assists in ensuring the safety of all trucking and rigging operations through the enforcement of safety standards and regulations.
 - -- reviews and interprets Company and Department safety regulations.
 - -- presents and explains to employees in tailgate conferences.

D. <u>DIMENSIONS</u>:

Value of Equipment Used

\$250,000.00

Total Staff-Non-Exempt

19

Exempt Job Description

POSITION:		Supervisor	JOB CODE:	
DIVISION:		Shop	APPROVALS:	
DEPARTMENT:		Stores		
ORGANIZATION:		Accounting, Procurement & Service	DATE:	
NOTE: Statements included in this description are intended to reflect in general the duties and responsibilities of this classification and are not to be interpreted as being all inclusive.				

A. JOB SUMMARY:

This position is accountable for the repair and testing performed in the Shop Division at the Materials Management Center. This includes the effective planning, organizing, direction, scheduling and coordinating the work load of a multi-purpose shop operation for the overhaul, repair, fabrication and testing of equipment; including major and minor operating equipment, special fixtures and fabrications plus the maintenance of Shop facilities. Insuring that adequate equipment, personnel and materials are available to provide these services is also included in these accountabilities.

Other responsibilities include the evaluation and correction of work performed by Shop personnel; assisting in the development and implementation of operating budgets and forecasts; plus cost control, report writing, estimating, training and providing for a safe working atmosphere.

B. NATURE AND SCOPE:

This position reports to the Head of the Shop Division, who along with the heads of the Stock and Trucking Divisions, reports to the Manager of the Materials Management Center. These groups are all part of the Stores Department in the Accounting, Procurement and Service Organization. The incumbent is one of two Supervisors who have direct responsibility for twenty-seven (27) Mechanics and Mechanic Helpers.

The Shop Division's functions include the maintenance, repair, assembly, fabrication and testing of various electrical, mechanical, hydraulic and pneumatic equipment used in all areas of the Company. A general knowledge of this equipment and a detailed knowledge of the techniques and skills utilized during the service and repair of the equipment is necessary for this position.

The duties are primarily supervisory in nature, and require good oral and written communication skills; plus a good knowledge of management techniques for scheduling and work measurement.

B. NATURE AND SCOPE: (Cont'd)

The ability to interface with all areas and many levels of personnel within the Company is necessary to effectively accomplish the various functions of the Division. An ability to work with outside vendors and suppliers is also required in the routine duties of this position.

The incumbent must have a working knowledge of Company and Department policies, various Union-Management agreements, plus an ability to make operating and technical decisions regarding Division activities.

C. PRINCIPAL ACCOUNTABILITIES:

- 1. Supervise the activities of the Division to accomplish scheduled and unscheduled work on a 24 hour basis.
 - -- fabricate special tools and equipment for use by field crews throughout the system
 - -- construct accurate detailed scale models of power equipment and facilities
 - -- heat treat metals
 - -- inspect and repair fork trucks, cranes, dockboards and other material handling equipment
 - -- construct special test equipment, test jigs and test set ups
 - select materials and execute shop designs on the basis of sketches and/or performance specifications
 - -- maintain Shop equipment in proper operating condition
 - -- repair and service instruments, tools, pumps, blowers, compressors and other equipment
 - -- overhaul, repair, refurbish and test power equipment, including transformers, regulators, switches, reclosures, etc.
 - -- test new equipment for evaluation purposes
 - -- test rubber protective safety equipment
 - -- conduct factory inspections of new equipment to determine compliance with specifications
 - -- install and remove radio/communications equipment in vehicles
 - -- construct/fabricate special tools and devices
 - -- test and repair combustible gas and oxygen analyzers

C. PRINCIPAL ACCOUNTABILITIES: (Continued)

- -- perform field repairs and modifications to installed equipment in the vicinity of live high voltage lines
- -- maintain adequate stock, parts, tools and equipment
- -- meet with Division/Company personnel to schedule and expedite priority items
- -- perform welding, metal spray and blacksmith operations
- -- perform precision machining operations
- -- perform carpentry, woodworking, cabinet making and repair services
- -- inspect equipment to determine if items are usable, repairable or to be scrapped.
- 2. Develop and establish repair, fabrication and testing procedures to insure efficient and up to date performance.
 - -- review existing procedures and operations for improvement
 - -- assure compliance to various regulatory requirements
 - -- investigate new equipment and methods
 - -- make periodic economic evaluations of various operations
 - -- perform technical evaluations for the repair and/or replacement of equipment
 - -- design and construct special devices and equipment
 - -- make physical property evaluations of materials and systems for shop and system use
 - -- provide consultation and shop services to all areas of the Company
- 3. Provide safe, reliable and economical service to various company operations.
 - -- anticipate service and repair requirements.
 - -- review TBR (to be repaired) equipment with Stock Division to help schedule workload.
 - -- determine work priorities and schedule personnel and equipment.
 - -- control/record assignment of tools.
 - -- provide for repair or replacement of defective tools and equipment.

C. PRINCIPAL ACCOUNTABILITIES: (Continued)

- -- provide periodic reports on the status of various projects and equipment under his control.
- 4. Develop work measurement and productivity standards.
 - -- perform productivity studies, including the development of productivity systems
 - -- maintain work measurement data
 - -- review and update productivity measures to insure validity
 - -- make periodic productivity audits
 - -- prepare productivity reports
 - -- conduct annual evaluations of personnel
- Help to develop and prepare Division budgets and cost control procedures.
 - -- develop annual work load and personnel requirements
 - -- develop an annual budget including tools, materials and equipment
 - -- review monthly and yearly work schedules to reduce overtime
 - -- review operating expenses for reductions and improvements
- 6. Provide a safe working environment.
 - -- hold frequent safety discussions to develop a safe working atmosphere
 - -- hold Monthly Area Safety Meetings, including both union and supervisory personnel
 - -- insure that all personnel are trained on the safety related aspects of their work.
 - -- make periodic safety inspections to insure that Company, Department and Division safety policies are being followed
 - -- make frequent reviews and updates on pertinent federal/state safety regulations
- 7. Provide technical training for all Division personnel to ensure a productive and efficient work force.
 - -- develop and present training programs to all levels of Division personnel

C. PRINCIPAL ACCOUNTABILITIES: (Continued)

- -- insure availability of operating procedures for all equipment
- -- maintain a training history for all personnel
- -- provide periodic review of employee skills

D. DIMENSIONS:

Equipment Inventory

\$1.5M

Supervises:

Directly

27 Mechanics, Mechanic-Helpers

Scope:

Shop Size -

53,000 ft²

Material Handling - 2-25 Ton Travelling Cranes

3 - 5 Ton Jib Cranes

Overhead Monorail Systems

Multi-Station Air Bearing System

Fork Trucks

Specialty Areas -

Cover Burning, Sand Blast, Spray Paint, Welding, Carpentry, Machine Shop, Blacksmith Area

E. MINIMUM QUALIFICATIONS:

- -- Associate degree including emphasis in shop work, or the equivalent in substantial, responsible shop experience in the field of electrical equipment test and repair, supplemented by evidence of formal education in english, mathematics and shop mechanics
- -- additional courses in shop related work
- -- 5 years "hands on" experience in shop work
- -- effective managerial skills, including work scheduling and prioritization, oral and written communication, personnel supervision
- -- working knowledge of Company, Department and Division policies and practices
- -- ability to express thoughts clearly, both verbally and in writing
- -- demonstrated ability to supervise and direct personnel, including scheduling and prioritization of assignments

Non-Exempt Job Description

POSITION:	Stock Keeper A	JOB CODE:	690
DIVISION:	Stock	APPROVALS:	
DEPARTMENT:	Stores		-
ORGANIZATION:	Accounting, Procurement and Service	DATE:	February 10, 1982

NOTE:

Statements included in this description are intended to reflect in general the duties and responsibilities of this classification and are not to be interpreted as being all inclusive.

A. JOB SUMMARY:

This position is accountable for contributing to the stock-room management through directing personnel and performing stock room tasks.

B. REPORTING RELATIONSHIPS AND ENVIRONMENT:

This position reports to the Stock Room Supervisor who reports to the Division Head.

The Stores Department is responsible for acquiring and storing materials used throughout the Company, for transporting these materials, and for repairing and assembling materials and equipment.

The Stock Division is responsible for receiving, storing, issuing and keeping records of materials used through the Company.

This position is responsible for directing activities in the stock room. The incumbent directs the material ordering, inspection and transport. The incumbent is under general supervision and exercises considerable judgment within prescribed limitations. Also performs all functions of lower grades.

- 1. Directs and instructs the activities of other stockkeepers.
- Operates computer terminals for stock functions.
- Maintains adequate levels of stock as directed.
- 4. Confers with contractor and Company personnel concerning important material substitutions.

C. <u>ILLUSTRATIVE ACTIVITIES</u>: (Continued)

- 5. Is responsible for any of the following, as applicable: security, safety, scrap, hazardous wastes, receiving, oil reclamation, rubbish pick-up, transformers, etc.
- 6. Operates all materials handling equipment including mobile cranes.

Non-Exempt Job Description

POSITION:	Stock Keeper B	JOB CODE:	690
DIVISION:	Stock	APPROVALS:	
DEPARTMENT:	Stores		
ORGANIZATION:	Accounting, Procurement and Service	DATE:	February 10, 1982

NOTE:

Statements included in this description are intended to reflect in general the duties and responsibilities of this classification and are not to be interpreted as being all inclusive.

A. JOB SUMMARY:

This position is responsible for contributing to the receipt, handling and storage of Company materials and components through operating stockroom equipment and directing lower grade positions.

B. REPORTING RELATIONSHIPS AND ENVIRONMENT:

This position reports to the Stock Room Supervisor who reports to the Division Head.

The Stores Department is responsible for acquiring and storing materials used throughout the Company, for transporting these materials, and for repairing and assembling materials and equipment.

The Stock Division is responsible for receiving, storing, issuing and keeping records of materials used through the Company.

This position is responsible for contributing to the management of the stock room through operating the equipment and directing other stock-room personnel. The incumbent operates cranes and trucks and assumes responsibility for the movement of materials within the stock room. S/he ensures that requisitions are filled and, if necessary, confers with Company personnel regarding material substitutions. In addition, the incumbent dispatches stock from the store room and prepares shipping papers. Also performs all functions of lower grades.

- 1. Directs, instructs and performs the activities of stock keepers of lower grades.
- Operates cable packaging machines.

C. <u>ILLUSTRATIVE ACTIVITIES</u>: (Continued)

- Is responsible for security, safety, and hazardous waste handling, in accordance with applicable procedures.
- 4. Prepares teaming tickets and other shipping documents.
- 5. Acts as cable and/or stock despatcher.
- 6. Operates all materials handling equipment.

Non-Exempt Job Description

POSITION:	Stock Keeper C	JOB CODE:	690
DIVISION:	Stock	APPROVALS:	
DEPARTMENT:	Stores		
ORGANIZATION:	Accounting, Procurement and Service	DATE:	February 10, 1982

NOTE:

Statements included in this description are intended to reflect in general the duties and responsibilities of this classification and are not to be interpreted as being all inclusive.

A. JOB SUMMARY:

This position is accountable for contributing to the materials handling in the stock room through checking items and documentation and operating stock room equipment.

B. REPORTING RELATIONSHIPS AND ENVIRONMENT:

This position reports to the Stock Room Supervisor who reports to the Division Head.

The Stores Department is responsible for acquiring and storing materials used throughout the Company, for transporting these materials, and for repairing and assembling materials and equipment.

The Stock Division is responsible for receiving, storing, issuing and keeping records of materials used throughout the Company.

This position is responsible for contributing to the materials handling in the stock room through checking and movement of stock items. The incumbent reviews documents, unpacks and stores and issues items as needed. S/he occassionally contacts Company and contractor personnel regarding minor material substitutions. Also performs all functions of lower grade.

C. <u>ILLUSTRATIVE ACTIVITIES:</u>

- Fills and processes debit and credit requisitions for spare parts, production orders and operating materials.
- Assists stockkeepers of higher ratings.
- Records and checks materials received from vendors, under the direction of a Stock Keeper A (receiver).

C. ILLUSTRATIVE ACTIVITIES: (Continued)

- 4. Operates hand trucks, fork lift trucks, elevators overhead cranes and other materials handling equipment.
- 5. Checks and reports stock levels.
- 6. Loads and unloads trucks.
- 7. Maintains orderliness of stock area.
- 8. Is responsible for security, safety and hazardous waste handling, in accordance with applicable procedures.
- 9. Packages stock and assembles orders.
- 10. Operates computer terminals.

Non-Exempt Job Description

POSITION:	Stock Keeper D	JOB CODE:	690	
DIVISION:	Stock	APPROVALS:		
DEPARTMENT:	Stores			
ORGANIZATION:	Accounting, Procurement and Service	DATE:	February 10,	1082
		DAIE.	rebluary 10,	1702

NOTE:

Statements included in this description are intended to reflect in general the duties and responsibilities of this classification and are not to be interpreted as being all inclusive.

A. JOB SUMMARY:

This position is accountable for assisting in the operation of the stock room and for acquiring the experience necessary to function in the higher level positions of the Division.

B. REPORTING RELATIONSHIPS AND ENVIRONMENT:

This position reports to the Stock Room Supervisor who reports to the Division Head.

The Stores Department is responsible for acquiring and storing materials used throughout the Company, for transporting these materials, and for repairing and assembling materials and equipment.

The Stock Division is responsible for receiving, storing, issuing and keeping records of materials used through the Company.

This position is responsible for performing the duties of a Grade C Stock Keeper when qualified, and for developing the skills and knowledge required of the higher grade positions. This position is essentially a training period intended to provide experience for other positions in the Stock Division.

- 1. Fills requisitions for spare parts, production orders and operating materials.
- Assists in recording and checking material from vendors under the direction of a Stock Keeper A (receiver).
- Assist stock keepers of higher grades.
- Loads and unloads trucks.

C. <u>ILLUSTRATIVE ACTIVITIES</u>: (Continued)

- Packages stock and assembles orders.
- 6. Operates hand trucks, elevators, cranes, fork lifts and other materials handling equipment under general supervision.
- 7. Maintains orderliness of stock area.
- 8. Operates computer terminals.

Non-Exempt Job Description

POSITION:	Driver - Boom Truck	JOB CODE:	251
DIVISION:	Trucking	APPROVALS:	
DEPARTMENT:	Stores		
ORGANIZATION:	Accounting, Procurement & Service	DATE:	February 10, 1982
NOTE: Sta	tements included in this description	are intend	ed to reflect in

Statements included in this description are intended to reflect in general the duties and responsibilities of this classification and are not to be interpreted as being all inclusive.

A. JOB SUMMARY:

This position is accountable for moving material and equipment weighing up to ten tons through the use of a boom truck and heavier loads with tractor/trailers.

B. REPORTING RELATIONSHIPS AND ENVIRONMENT:

This position reports to the Supervisor who reports to the Division Head.

The Stores Department is responsible for acquiring and storing materials used throughout the Company, for transporting these materials, and for repairing and assembling materials and equipment.

The Trucking Division is responsible for transporting and delivering material that is used throughout the Company.

The Boom Truck Operator is responsible for driving and operating the boom truck and for directing the activities of several Truck Drivers and Truck Driver's Helpers when their work is associated with boom truck projects. In addition to knowing how to operate all of the trucks in the Division, including the tractor-trailer, the incumbent must be skilled in operating the boom hoist and have knowledge of its limitations. The incumbent directs the jacking, blocking and leveling of the boom truck, and the lifting of Company transformers, cable reels and other equipment.

- 1. Drives boom trucks, tractor trailer and other trucks.
- 2. Operates boom hoist and observes appropriate weight and boom extension limitations.
- 3. Directs the bracing and leveling of the boom truck.
- 4. Directs projects such as the removing or installing of a large transformer including cribbing, jacking and rigging required to move transformers and remove vault covers.

- C. <u>ILLUSTRATIVE ACTIVITIES</u>: (Cont'd)
 - 5. Delivers cable reels, transformers and other Company equipment and materials.
 - 6. Performs work of Truck Driver Grade A and B.

Non-Exempt Job Description

POSITION:	Truck Driver Grade A	JOB CODE:	748
DIVISION:	Trucking	APPROVALS:	
DEPARTMEN	T: Stores		
ORGANIZAT	ION: Accounting, Procurement & Service	DATE:	February 10, 1982
NOTE:	Statements included in this description general the duties and responsibilities	are intend	ed to reflect in

are not to be interpreted as being all inclusive.

A. JOB SUMMARY:

The Grade A Truck Driver is accountable for delivering Company equipment weighing less than ten tons through the use of a rack truck and hauling equipment.

B. REPORTING RELATIONSHIPS AND ENVIRONMENT:

This position reports to the Supervisor who reports to the Division Head.

The Stores Department is responsible for acquiring and storing materials used throughout the Company, for transporting these materials, and for repairing and assembling materials and equipment.

The Trucking Division is responsible for transporting and delivering material that is used throughout the Company.

This position is responsible for driving rack trucks and using jacks and other equipment for hauling Company equipment and materials to a specified location. The incumbent works with and directs the Grade A Trucker's Helper in loading and unloading equipment and moving it to locations specified by the user, which sometimes has difficult access.

The incumbent must be trained to operate the boom truck during emergencies. This includes knowing the limitations of and having skill in the operation of the crane.

- 1. Drives trucks with loads less than ten tons.
- 2. Maintains records of equipment and material users and user specified locations.
- 3. Directs activities of the Truck Driver's Helper Grade A.

C. ILLUSTRATIVE ACTIVITIES: (Cont'd)

- 4. Ropes, chains or otherwise ensures that equipment is securely attached to the truck.
- 5. Moves transformers, tanks and other equipment and materials to locations that are inaccessible by truck.
- 6. Occasionally drives out of state.
- 7. Cribs, rigs and jacks transformers and vault covers for placing transformers, in conjunction with boom truck crews.

Non-Exempt Job Description

POSITION:	Truck Driver Grade B	JOB CODE:	748
DIVISION:	Trucking	APPROVALS:	
DEPARTMENT:	Stores		
ORGANIZATION	: Accounting, Procurement & Service	DATE:	February 10, 1982
NOTE: St	atements included in this description	are intende	ed to reflect in

are not to be interpreted as being all inclusive.

JOB SUMMARY:

Α.

The Grade B Truck Driver is accountable for delivering Company equipment weighing less than three tons through the use of van trucks and other equipment.

general the duties and responsibilities of this classification and

B. REPORTING RELATIONSHIPS AND ENVIRONMENT:

This position reports to the Supervisor who reports to the Division Head.

The Stores Department is responsible for acquiring and storing materials used throughout the Company, for transporting these materials, and for repairing and assembling materials and equipment.

The Trucking Division is responsible for transporting and delivering material that is used throughout the Company.

This position is responsible for driving a van truck for the delivery of equipment and materials. The incumbent directs the activities of the Grade B Driver's Helper, and is responsible for ensuring accurate records of delivery items and locations.

Occasionally the incumbent will participate in a team that is removing or installing a large transformer.

- 1. Drives trucks with less than three ton loads.
- Keeps account of delivery items and locations.
- 3. Secures material and equipment inside truck.
- Directs activities of Grade B Driver's Helper.

C. <u>ILLUSTRATIVE ACTIVITIES</u>: (Cont'd)

- 5. Moves transformers, tanks and other equipment and materials to locations that are inaccessible by truck.
- 6. Occasionally drives out of state.
- 7. Cribs, rigs and jacks transformers and vault covers for placing transformers, in conjunction with boom truck crews.

Non-Exempt Job Description

POSITION:	Truck Drive	r Helper Grade A	_ JOB CODE:	750
DIVISION:	T	rucking	APPROVALS:	
DEPARTMEN'	': <u>s</u>	tores	-	
ORGANIZAT	ON: Accounting, Pr	ocurement & Servic	e DATE:	February 10, 1982
NOTE:	Statements include general the duties are not to be inte	and responsibilit	ies of this cl	ed to reflect in assification and

A. JOB SUMMARY:

This job is accountable for assisting the Grade A or Boom Truck Driver in making deliveries of any Company equipment.

B. REPORTING RELATIONSHIPS AND ENVIRONMENT:

This position reports to the Supervisor who reports to the Division Head.

The Stores Department is responsible for acquiring and storing materials used throughout the Company, for transporting these materials, and for repairing and assembling materials and equipment.

The Trucking Division is responsible for transporting material that is used throughout the Company.

The Grade A Driver's Helper drives with and acts under the direction of the Grade A Truck Driver. S/he assists in loading and unloading Company material and equipment, securing this equipment to the truck, and moving it from the truck to the necessary location. The incumbent gives signals to the driver when the passage is narrow or when the truck is going in reverse. When the incumbent assists the Boom Truck Operator, s/he uses jacks, blocks, and slings in order to hoist transformers and other equipment. The incumbent also assists in leveling the boom truck with blocks and jacks.

- Assists in loading, securing loads and unloading the truck.
- 2. Guides the truck driver through narrow passages and when he is going in reverse.
- 3. Assists in moving transformers, cable reels and other equipment to locations away from the truck.

C. <u>ILLUSTRATIVE ACTIVITES</u>: (Cont'd)

- 4. Assists in leveling the boom truck. Uses blocks and jacks to move equipment.
- 5. Ensures that equipment is securely attached to the boom hook by positioning and examining the sling and cable hook.
- 6. Cribs, rigs and jacks transformers and vault covers and gives boom movement signals to boom operators.

Non-Exempt Job Description

POSITION:	Truck Driver Helper Grade B	JOB CODE:	750
DIVISION:	Trucking	APPROVALS:	
DEPARTMENT	: Stores		·
ORGANIZATI	ON: Accounting, Procurement & Servi	ce DATE:	February 10, 1982
NOTE:	Statements included in this descrip general the duties and responsibili	tion are intende	ed to reflect in

are not to be interpreted as being all inclusive.

A. JOB SUMMARY:

This job is accountable for assisting the Grade B Truck Driver with the delivery of Company equipment and materials.

B. REPORTING RELATIONSHIPS AND ENVIRONMENT:

This position reports to the Supervisor who reports to the Division Head.

The Stores Department is responsible for acquiring and storing materials used throughout the Company, for transporting these materials, and for repairing and assembling materials and equipment.

The Trucking Division is responsible for transporting and delivering material that is used throughout the Company.

The Grade B Driver's Helper is responsible for assisting the Grade B Truck Driver in delivering loads that weigh less than three tons. The incumbent loads and unloads equipment and assists in moving it to locations away from the truck. Occasionally the Helper will work on a team that is lifting heavy equipment with a boom truck.

- 1. Loads and unloads van trucks and other trucks.
- 2. Moves tanks, oil drums and other equipment away from the truck to a specified location.
- 3. Assists in using jacks, blocks and hoists to lift equipment.
- 4. Gives direction signals to truck driver in difficult situations.
- 5. Places cones, barriers and other necessary protective devices.

Non-Exempt Job Description

POSITION:	Mechanic - Central Shop A	JOB CODE:	651
DIVISION:	Central Shop	APPROVALS:	
DEPARTMENT:	Stores		
ORGANIZATION:	Accounting, Procurement and Service	DATE:	November 20, 1981

NOTE: Statements included in this description are intended to reflect in general the duties and responsibilities of this classification and are not to be interpreted as being all inclusive.

A. JOB SUMMARY:

This position is accountable for assembling and repairing Company equipment through utilizing mechanical skills including machine work and carpentry.

B. REPORTING RELATIONSHIPS AND ENVIRONMENT:

This position reports to the Supervisor who reports to the Central Shop Division Head.

The Stores Department is responsible for the procurement and storage of materials used throughout the Company, for transporting these materials, and for repairing, assembling and testing materials and equipment.

The Central Shop Division is responsible for the maintenance, repair, assembly, fabrication and testing of various electrical, mechanical, hydraulic and pneumatic equipment used in all areas of the Company. The employees in this Division acquire and utilize broad mechanical skills including welding, machining, painting and wood working.

This position is responsible for repairing and assembling Company equipment through the use of a broad set of skills including carpentry, machine working, welding, painting and splicing. The Mechanic determines which tools, methods and materials will be used in the construction, testing or maintenance of hydraulic, pneumatic, mechanical or electrical equipment. S/he performs the repair work or assembly and directs the Mechanic - Central Shop B in similar tasks.

C. <u>ILLUSTRATIVE</u> ACTIVITIES:

- 1. Welds transformer covers and other equipment.
- 2. Makes electrical connections and performs cable splicing.

C. <u>ILLUSTRATIVE ACTIVITIES</u> (Cont'd):

- 3. Operates lathes, drill presses, milling machines and performs other machine shop work.
- 4. Overhauls generators and other combustible machines.
- 5. Assembles and tests transformers.
- 6. Repairs electric, pneumatic, hydraulic and gasoline pumps.
- 7. Performs carpentry work.
- 8. Paints equipment and sand blasts.
- 9. Performs various testing operations.
- 10. Fabricates equipment and devices from basic sketches.
- 11. Repairs complete relays.
- 12. Repairs and tests material handling equipment.

Non-Exempt Job Description

POSITION:	Mechanic - Central Shop B	JOB CODE:	651
DIVISION:	Central Shop	APPROVALS:	
DEPARTMENT:	Stores		
ORGANIZATION:	Accounting, Procurement and Service	DATE:	November 20, 1981

NOTE: Statements included in this description are intended to reflect in general the duties and responsibilities of this classification and are not to be interpreted as being all inclusive.

A. JOB SUMMARY:

This position is accountable for the construction and repair of Company equipment utilizing various the mechanical skills.

B. REPORTING RELATIONSHIPS AND ENVIRONMENT:

This position reports to the Supervisor who reports to the Central Shop Division Head.

The Stores Department is responsible for the procurement and storage of materials used throughout the Company, for transporting these materials, and for repairing, assembling and testing materials and equipment.

The Central Shop Division is responsible for the maintenance, repair, assembly, fabrication and testing of various electrical, mechanical, hydraulic and pneumatic equipment used in all areas of the Company. The employees in this Division acquire and utilize broad mechanical skills including welding, machining, painting and wood working.

The Mechanic - Central Shop B is is responsible for repairing overhauling and assembling Company equipment and for acquiring the skills required of a Mechanic - Central Shop A. The incumbent develops his skills by testing and repairing all types of pumps, machines, transformers and performing the other tasks of the Mechanic - Central Shop A.

C. <u>ILLUSTRATIVE</u> ACTIVITIES:

- 1. Performs all work in the repair, construction and testing of underground and overhead transformers.
- Performs splicing and other electrical work.
- Performs machine shop work.

C. <u>ILLUSTRATIVE ACTIVITIES</u>: (cont'd)

- 3. Performs splicing and other electrical work.
- 4. Performs machine shop work.
- Performs carpentry tasks.
- 6. Overhauls generators and other machines.
- 7. Services equipment used in the shop.
- 8. Overhuals engines, pumps, blowers, etc.
- 9. Services material handling equipment and repairs.
- 10. Maintains required records.
- 11. Tests rubber protective equipment.
- 12. Tests and repairs gas analyzers.
- 13. Repairs and tests instruments and relays.

(ST14/K19)

CONTINGENCY PLAN

STORES DEPARTMENT CONTINGENCY PLAN

May 15, 1981 Revised April 14, 1983

1.0 PURPOSE

This plan specifies how hazardous waste and materials will be handled in a safe and spill-free manner, and prevention and control procedures to be followed when a spill or release of such substances occurs. The objective of this plan is to insure the protection of human health and the environment from hazardous waste and materials in accordance with 30 CMR 30.520 through 30.524.

2.0 APPLICABILITY

This contingency plan applies to the handling, transporting, storing and disposing of all hazardous waste and materials within the areas of responsibility of the Stores Department. The requirements of this plan are mandatory for all functions of hazardous waste and materials management.

3.0 PROCEDURES - SPILLS AND/OR LEAKS

The following Stores Department Plan of Action is summarized in the attached flow diagram chart, Exhibit #3.0-B. Reports are in accord with Boston Edison Company Bulletin #B-27, para. VIII-8-I A, copy attached as Exhibit #3.0-A.

3.1 Person Discovering the Condition

Any employee detecting a spill or leak will immediately notify the supervisor in charge. Procedures to call for fire, police or ambulance, if needed, are posted by all telephones in each storage location.

3.2 <u>Supervisor Notified of Incident</u>

That supervisor will assess the situation and will direct emergency response action to contain the contamination and secure the area. The supervisor will then notify the applicable Emergency Coordinator, giving the following information:

- Identification of hazardous waste or materials involved.
- Time of spill or leak.
- Location of incident including type of terrain and nearest water or drains.
- Estimated volume of spill.

Preliminary assessment of clean-up requirements including the contact of a cleanup contractor if deemed necessary. A list of approved contractors includes:

Clean Harbors	Kingston, MA	585-5111
Clean Industries	East Boston, MA	567-6500
Recycling Industries	Braintree, MA	848-0612
Jet Lines Service	Stoughton, MA	848-2829
Inland Pollution Control	Braintree, MA	843-7110

- Persons on the scene.
- Pertinent weather information.

3.3 Emergency Coordinators

The following persons are designated as Emergency Coordinators for the Stores Department:

1	(Primary)	Richard M. Cronin
		Stock Division Head, Stores Department
		480 Arsenal Street, Watertown, MA 02172
		Telephone: 424-3467 Home Phone: 327-8926

- 2 (Alternate) John T. O'Sullivan
 Trucking Division Head, Stores Department
 480 Arsenal Street, Watertown, MA 02172
 Telephone: 424-3643 Home Phone: 1-587-6801
- 3 (Alternate) John W. Gannon
 Manager Materials Management Center, Stores
 Department
 480 Arsenal Street, Watertown, MA 02172
 Telephone: 424-3685 Home Phone: 1-879-3732
- 3.3.1 Emergency Coordinator will notify Stores Department Superintendent and Materials Management Manager of incident.
- 3.3.2 Emergency Coordinator will notify Trucking Division, Shops Division, and/or Stock Division Heads depending on situation.
- 3.3.3 Emergency Coordinator will assess situation together with the applicable Division Heads.
- 3.3.4 Emergency Coordinator will direct clean-up action dispatching necessary personnel and equipment to spill site.
- 3.3.5 Emergency Coordinator will notify the below listed agencies and/or persons:
 - Local Police, Fire, or other designated community agencies.
 - National Response Center (USGC) 800-424-8802

-	Captain of the Port First Coast	
	Guard District Boston*	223-1470
•••	EPA, Regional Administrator	223-7265
	After Hours	861-6700
-	Dept. of Transportation** 202	-426-1830
-	Commonwealth of Massachusetts	
	DEQE, Division of Water Pollution	
	Control	727-6373
		935-2160
	After Hours	727-3189
-	DEQE Office of Incident Response	292-5648
	After Hours	566-4500
-	Boston Edison Company	300 1300
	- Report Dispatcher	424-2055
	- Director Public Information	424-2116
	 Investigation Division 	666-4220
	- Environmental Affairs	424-2537
		727 ZJJ1

*For Discharge into Waterway's **For Transportation Incident Only.

- 3.3.6 Emergency Coordinator will prepare and forward necessary spill reports to:
 - EPA Regional Administrator
 - DOT, Associate Director for Hazardous Material Regulation*
 - Stores Department Superintendent
 - Legal Department
 - Environmental Affairs
 - Other Agencies and/or Persons as Required

3.3.7 SPCC Plan - Reports

The Spill Prevention Control and Countermeasure Plans required by the Environmental Protection Agency also provide that written report be submitted within 60 days if there is a discharge of more than 1,000 gallons of oil into a waterway in a single event; or if there are two spill events reportable in accordance with Paragraph 8-1 within any twelve month period. The report must be made by division responsible for the spill with the complete information required in Title 40, CFR Part 112.4. The original report must be filed with the EPA Regional Administrator and a copy sent to the Massachusetts Division of Water Pollution Control.

3.3.8 Other Reports

Other environmental reports not associated with a specific incident, but required as a provision of permits, licenses, etc. issued by various agencies shall be the responsibility of the department concerned unless other arrangements for such reports have been established.

*For Transportation Incident Only.

3.4 Arrangements to familizarize local agencies with the layout of the facility, properties of hazardous wastes handled at the facility, hazards associated with such wastes, places where personnel would be working, entrances to and roads inside of the facility including possible evacuation routes are coordinated with the Public Information Department. Local Agencies include police and fire departments, boards of health, emergency response teams and local hospitals.

Copies of the contingency plan will be sent the local police and fire departments, hospitals, boards of health, chief executive offices of the community, state and local emergency teams and the State Department of Environmental Quality Engineering.

3.5 Spill Containment Materials

Equipment and materials necessary to respond to spills and leaks shall be maintained at each Stores Department area. Recognizing the need to tailor equipment and materials requirements to incident probabilities, four categories are established depending on quantities of hazardous materials stored, handled or transported, and whether the material is indoors or outdoors. See attached Exhibit 3.5-A for listing of items.

- CATEGORY A Hazardous Waste Disposal Storage Site Watertown Materials Management Center
- CATEGORY B Hazardous Materials in Stock, Quantities Exceeding 50 Gallons:
 Boston Service Center, Massachusetts Avenue
- CATEGORY C Hazardous Materials in Stock, Quantities Less than 50 Gallons:

 Hyde Park Service Center, Stock Room
 Framingham Service Center, Stock Room
 Northeast Service Center, Stock Room
 Waltham Service Center, Stock Room
 Woburn Service Center, Stock Room
 Walpole Service Center, Stock Room
- CATEGORY D Hazardous Materials and Waste in Transit and Stock in Outdoor Storage Yards:
 Trucking Division Vehicles
 Each yard storage zone at Watertown site.

NOTE: Generating Station Stock Rooms are covered in the Steam Operations Department Station Plans.

3.6 <u>Inspection of Spill Containment Materials</u>

Inspections shall be made monthly and recorded as described in the General Inspection Plan. Any discrepancy will be reported immediately to supervisor who will take immediate action to correct. Such discrepancies will be noted in the report.

3.7 Contingency Emergency Equipment

All facilities are equipped with telephones and emergency lighting and in addition the following will be utilized:

- 3.7.1 Two supervisors equipped with pageboys:
 Overhead Supervisor Pageboy #D120
 Station Supervisor Pageboy #D130
- 3.7.2 Off-hour duty supervisor can be contacted through 424-3695.
- 3.7.3 All Trucking Division vehicles are equipped with two way radios.

3.8 Facility Location and Manning

3.8.1 Materials Management Center and Hazardous Waste Disposal Site
480 Arsenal Street, Watertown, MA 02172
Telephone: 424-3678/3467
Manned: 7:30 AM to 4:00 PM, Monday thru Friday

3.8.2 Boston Service Center
1165 Massachusetts Avenue, Boston, MA 02125
Telephone: 424-3695/3696
Manned: 24 Hours, 7 Days a Week

3.9 Evacuation Plans and Drills

Because of the nature of materials that are received, stored and/or transported by the Stores Department, evacuation is not anticipated. Division Heads will arrange for periodic fire drills. When applicable, the Emergency Coordinator will determine whether or not to evacuate the area. Attached is a plot plan showing exists, entrances, hazardous waste storage locations and roads inside the facility, listed as Exhibit 3.9-A.

3.10 Containment Procedures

- 3.10.1 Incompatible wastes will be stored in separate locations to prevent fires, explosions, toxic gases, etc.
- 3.10.2 Special material handling equipment will be utilized, if required, when loading and unloading materials. This may include clean-up and containment equipment to prevent runoff.
- 3.10.3 The facilities shall be designed, constructed and operated to prevent runoff, flooding, and hazards to public health, including:
 - a. All hazardous waste handling will be done in an area minimizing environmental risk, utilizing spill containment kits as required.

- b. Spill containment kits are provided at each work location to prevent runoff of hazardous wastes to other areas of the facility or the environment.
- c. A special collection system is provided at the Watertown Oil Processing Facility to collect spills and prevent runoff.
- Special storage areas are provided for hazardous materials.
- 3.10.4 Special consideration will be made for possible power outages.

4.0 <u>DEFINITIONS</u>

All definitions are those given in current, applicable Federal and/or State regulations and publications.

5.0 RESPONSIBILITIES

- 5.1 The Stores Department Superintendent will be responsible for:
 - 5.1.1 Implementing the Contingency Plan.
 - 5.1.2 Reviewing the plan and amending it immediately when required.
 - 5.1.3 Designating Emergency Coordinators.
 - 5.1.4 Providing necessary personnel.
- 5.2 The Stock Division Head will be responsible for:
 - 5.2.1 Receipt, handling, storage and disposal of hazardous wastes and materials.
 - 5.2.2 Assignment of personnel and training.
 - 5.2.3 Security of Stock Division facilities, equipment and stock.
 - 5.2.4 Safety.
- 5.3 The Trucking Division Head will be responsible for:
 - 5.3.1 Transporting hazardous wastes and materials.
 - 5.3.2 Assignment of personnel and training.
 - 5.3.3 Security of Trucking Division facilities and equipment.
 - 5.3.4 Safety.

- 5.4 The Central Shops Division Head will be responsible for:
 - 5.4.1 Assisting other divisions and departments as requested in on-site draining of oil or PCB's from leaking equipment.
 - 5.4.2 Providing contained storage for leaking materials temporarily while awaiting repair, and repairing defective materials.
 - 5.4.3 Assignment of personnel and training.
 - 5.4.4 Security of Shops Division facilities and equipment, and materials under repair.
 - 5.4.5 Safety.

6.0 REFERENCES

- 6.1 Toxic Substances Control Act, Public Law 94-469
- 6.2 Resource Conservation and Recovery Act, 40 CFR Parts 261-265
- 6.3 Department of Transportation (DOT) 46 CFR & 49 CFR
- 6.4 Department of Labor (OSHA) 29 CFR
- 6.5 Commonwealth of Massachusetts Phase I Hazardous Waste Regulations 310 CMR 30.000

BULLETIN BOSTON EDISON COMPANY

No. B-27

REQUIRED REPORTS...

VIII. INCIDENTS AFFECTING SYSTEM OPERATIONS

8-1 System Trouble or Unusual Incidents

A. Any system trouble or unusual incident which does or could affect system operations must be reported immediately by the employee having such knowledge to the Report Dispatcher (424-2055). Typical incidents would include, but are not limited to:

Fires in or near stations or other Company property.

Wires burning and/or down.

Manhole disturbances.

Floods or water main breaks or spills into stations or manholes.

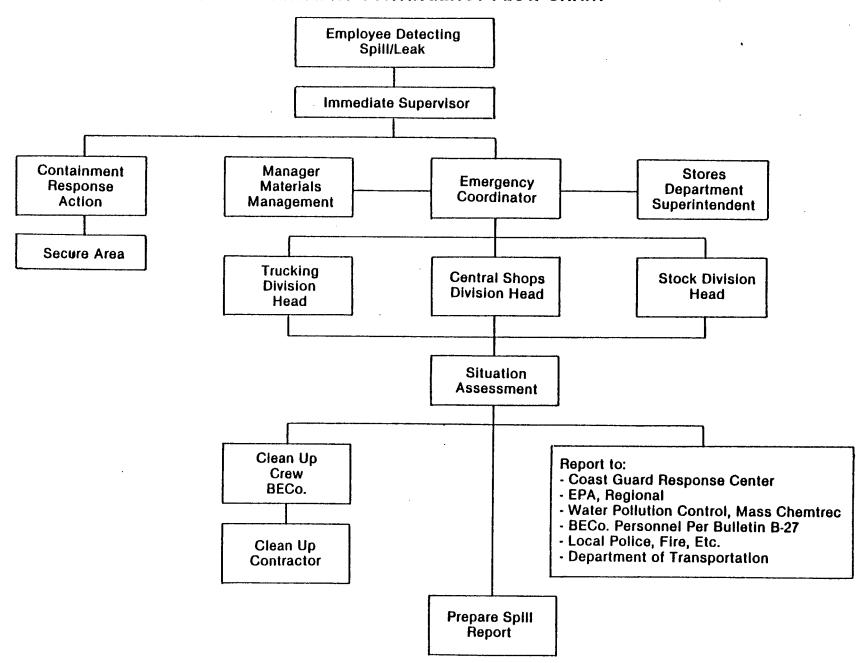
Cranes or other machinery in use near overhead wires.

Unauthorized entry into a station.

Local storms of a particularly severe nature.

- B. Reports of system trouble or unusual incidents from the general public received by any employee should be relayed promptly to the Report Dispatcher (424-2055).
- C. Aircraft which is flying too low in a hazardous manner over a station, overhead lines or other Company property must be reported immediately by the employee having such knowledge to the Report Dispatcher (424-2055). Aircraft shall be considered as flying too low if their altitude is less than 1,000 feet over congested areas or less than 500 feet over other areas. The report should include as much of the following information as possible: aircraft number; color and altitude of the aircraft; time, date and description of the incident; and names of other witnesses.

STORES DEPARTMENT CONTINGENCY FLOW CHART



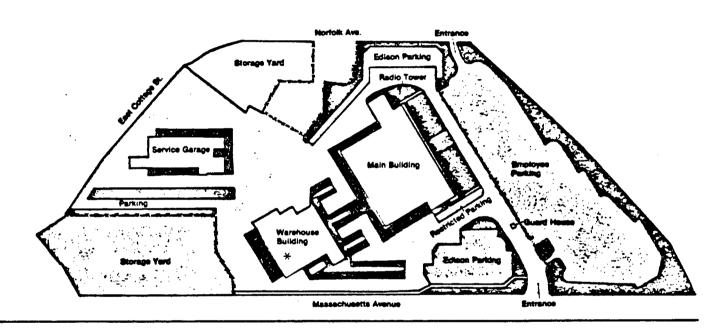
STORES DEPARTMENT CONTINGENCY SPILL KIT

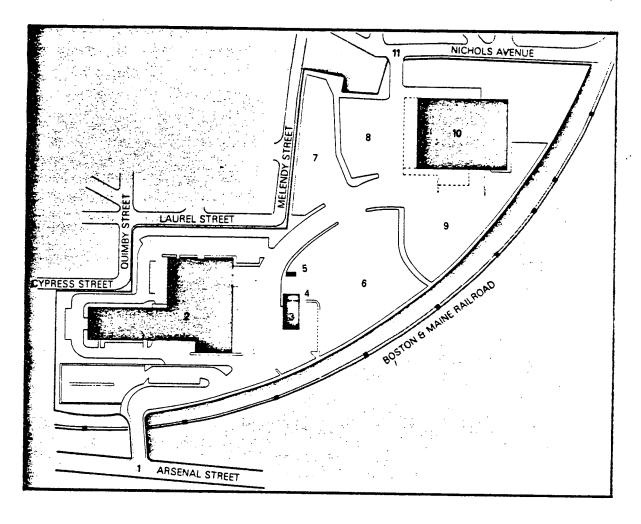
	STOCK	CATEGORY QUANTITIES			
ITEM	CODES	Α	<u>B</u>	С	D
Drum, Hazardous Waste, Open Top	023535	4	2	1	1
Oil Absorbent, Bag	600065	6	2	2	-
Broom Paving, with Handle	601521	2	1	1	-
Brush, Floor with Handle	601605	1	1	1	-
Pan, Dust	607565	1	1	1	-
Brush, Counter	601581	1	1	1	-
Shovel, Snow D Handle	608906	2	1	1	-
Pail, Paint with Cover, 5 Gal.	236662	2	1	1	-
Goggles, Plastic	605107	12	2	2	2
Shields, Face	608843,	4	1	1	-
Solvent A, 1 Gal. Can	608378	2	2	. 2	-
Cloth, Wiping #2, LB.	602488	10	5	5	-
Bag, Plastic Asbestos	600512	24	12	12	2
Label, PCB	659716	12	6	6	1
Label, Asbestos	608480	12	6	6	•
Tape, Masking 1 Inch	609365	6	2	2	-
Gloves, Rubber PR	604932	12	2	2	2 .
Boots, Rubber	601225	4	1	1	-
Respirator, Disposable, Asbestos	608203	4	4	4	2
Pillows, Oil Sorbent	(Purchase)	-	-	•	20
Respirator PCB	630031	2	2	2	2.
Jackets - LG	605614	2	1	1	1
Jackets - XL	605615	2	1	1	1
Pants - LG	607566	2	1	1	1
Pants - XL	607567	2	1	1	1

EXHIBIT 3.5-A

PLOT PLANS

Site Plan





- 1. MAIN ENTRANCE
- 2. CENTRAL SHOP AND SERVICE
 - 3. GARAGE AND TRUCKING OFFICE
- 4. OIL RECLAMATION
 - 5. BOTTLED GAS STORAGE
- * 6. LIVE STORAGE AND STAGING AREA III
 - 7. LIVE STORAGE AND STAGING AREA II
 - 8. LIVE STORAGE AND STAGING AREA!
 - 9. LIVE STORAGE AND STAGING AREA IV
- * 10. DISTRIBUTION FACILITY
 - 11. EMERGENCY ENTRANCE GATE
- * HAZARDOUS MATERIALS

CLOSURE PLANS

CLOSURE PLAN

FOR THE STORES DEPARTMENT MATERIALS MANAGEMENT CENTER 480 ARSENAL STREET, WATERTOWN, MA

General

This plan complies with Massachusetts Phase I Hazardous Waste Regulations Section 30-580.

The closure plan shall be amended as conditions affecting the plan change. A copy of the current plan shall be kept at the facility.

Description of Hazardous Wastes at the Facility

Certain wastes are collected and stored temporarily awaiting disposal. Storage and disposal methods comply with current Federal, State and City requirements. These wastes are:

- 1) Spent clay (Fuller's Earth) saturated with transformer (Transil) oil from the oil filtering and reclamation system.
- 2) Wastes such as rags, cans, Speedy-Dry and sweeping compound, which are saturated with oil.
- 3) Waste PCB materials.
- 4) Waste PCB contaminated materials.
- 5) Waste materials containing asbestos.
- 6) Waste solvents which have been used to clean oil drums and oil delivery vehicles.
- 7) Waste motor oil from the garage.
- 8) Other waste oils.
- 9) Small quantities of other miscellaneous controlled wastes which may accumulate from time to time.

Description of How the Facility Will be Closed

The facility was newly constructed in 1980 and the expected useful life of the facility is 50 years. At such time as this facility may be closed, the following steps shall be taken:

1) All hazardous wastes in storage shall be removed from this facility and taken either to another approved facility within this Company or to an authorized disposal contractor.

- 2) The maximum inventory of such wastes in storage during the life of the facility is estimated to be 30,000 gallons.
- 3) All oil-contaminated equipment which is not being moved to another site shall be flushed with solvent and the residue disposed of by currently authorized methods. This would include oily equipment in the garage and equipment associated with the oil reclamation and storage system, if any such equipment is to be abandoned at the facility.
- 4) At least six months before the date closure is to begin, the Commonwealth of Massachusetts Department of Environmental Quality Engineering will be notified, including submission of a copy of the latest closure plan. Closure shall begin within 30 days after receipt of the final volume of hazardous wastes.
- 5) At least 180 days before the date closure is expected to begin, this closure plan shall be submitted to the Department of Environmental Quality Engineering Division of Hazardous Waste, along with a schedule showing the final closure date and the date each step of closure will be taken. Within 90 days it will be returned to Boston Edison Company to be amended, or implemented as required.

Time Allowed for Closure

Within 90 days after receiving the final volume of hazardous wastes, they shall be removed from the facility. Within 6 months after receiving the final wastes, all other steps in the approved closure plan shall be completed.

Disposal or Decontamination of Equipment

Before completing closure all equipment and structures involved with the handling and storage of hazardous waste will be properly disposed of or decontaminated by removing all hazardous waste and residues. Analytical testing according to the methods described in the General Waste Analysis Plan will be used to determine the extent of decontamination and appropriate disposal alternatives.

Certificate of Closure

When closure is completed, certification shall be submitted to the DEQE, Division of Hazardous Waste by both the Boston Edison Company and a Massachusetts registered professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan.

Cost Estimate

Attached is a current cost estimate for implementing the closure plan. This estimate will be revised annually as required by the Phase I Regulations and will be included in the facility's annual report.

BOSTON EDISON CO. - MATERIALS MANAGEMENT CENTER WATERTOWN, MASSACHUSETTS CLOSURE COST ESTIMATE 1982

TTEM	VOLUME	HAZARDOUS WASTE	COST
MATERIALS	2,500 gal.	PCB LIQUIDS	\$ 9,000
	50,000 gal.	PCB CONTAMINATED LIQUIDS	175,000
	90,000 lb.	PCB SOLIDS/EMPTY DRUMS/ETC.	90,000
	10	PCB TRANSFORMERS	150,000
_	9,000 gal.	WASTE OILS, SOLVENTS, ETC.	18,000
	30,000 lb.	FILTER CLAY	2,500
_	40,000 lb.	ASBESTOS	5,000
		SUB TOTAL	449,500
FACILITIES	500 yd ³	MISCELLANEOUS CONTAMINATED SOLIDS	25,000
	2,000 gal.	MISCELLANEOUS LIQUIDS	4,000
T .		SUB TOTAL	29,000
.		TOTAL	\$478,500